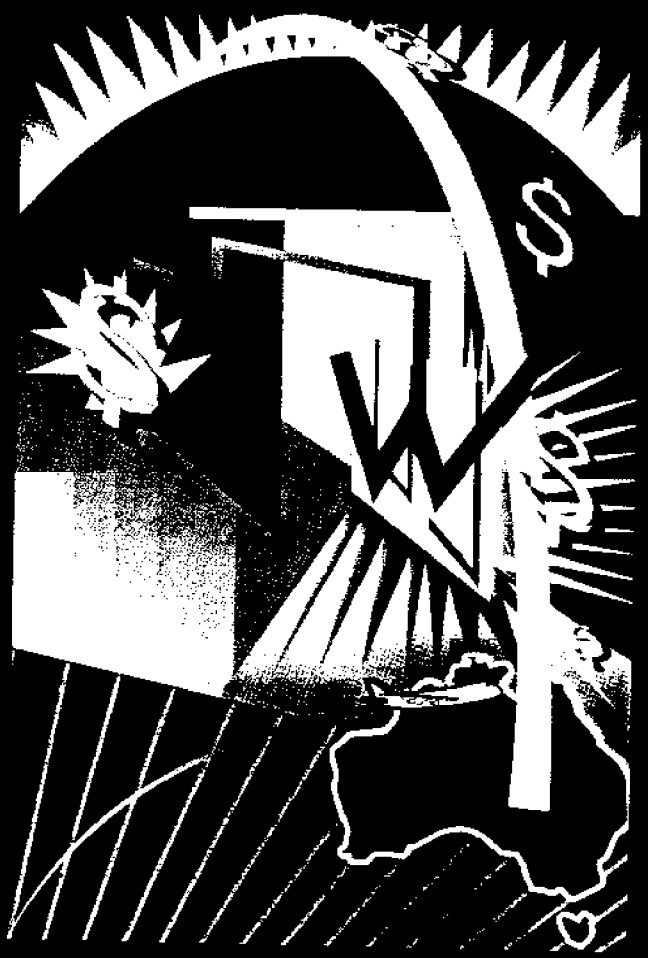
Australian Bureau of Statistics

Measuring Australia's Economy



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MEASURING AUSTRALIA'S ECONOMY

FOURTH EDITION

W. McLENNAN
Australian Statistician

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Contents

If we were looking for words that would best describe **Australian Economic Indicators**, we would be hard pressed to find better ones than "the economy in a briefcase".

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PREFACE

The fourth edition of *Measuring Australia's Economy* provides national statistics, definitions and references to further reading for over 50 major economic indicators used by analysts and the media today. Most importantly, to make this information available to all readers, particularly those without a background in economics, it is written in non-technical, simple English.

Measuring Australia's Economy includes the latest economic indicators measured by the Australian Bureau of Statistics along with indicators from other organisations and international comparisons for 11 key indicators.

Measuring Australia's Economy was developed in response to a need expressed by teachers, lecturers and other educators for a single, comprehensive source of economic indicator information. It has been designed as an information resource for students, analysts or anyone wishing to gain an understanding of economic indicators used to measure the performance of the Australian economy. It will enable the reader to understand exactly what an indicator is measuring, how this relates to economic activity, to look at data for an indicator over a period of time and to reference more detailed statistics or explanations if required.

Measuring Australia's Economy is one of a range of Bureau products designed or suitable for students. Other publications specifically written for the education sector include *Statistics - A Powerful Edge* (1331.0), *Surviving Statistics A User's Guide to the Basics* (1332.0), *Striking a Balance!* (1314.0), *Women and Work* (6205.0) and *Australia - Working it Out!* (1332.2).

I trust that this publication will assist the reader to understand the Australian economy and the changes going on within it.

W. McLENNAN
Australian Statistician

Australian Bureau of Statistics
Canberra ACT
January 1996

RELEVANCE TO CURRICULUM FRAMEWORKS

Measuring Australia's Economy supports the national curriculum frameworks now being applied in varying ways within schools by the State and Territory curriculum authorities. At the higher levels of the Studies of Society and Environment (SOSE) statements and profiles, in particular, there are requirements for students to describe and explain features of the Australian economic system and its relationship with the international economy. There is also emphasis on issues concerning Australian economic restructuring of recent years.

The material presented in Summary Measures of Economic Activity (Section 2.1), Domestic Consumption and Investment (2.3), Production (2.4), Prices and Income (2.5), Labour Force and Demography (2.6) and Financial Markets (2.7) all provide concise treatment of key Australian economic features. Australia's relationship with the international economy is concisely analysed in International Accounts and Trade (2.2) and in International Comparisons (Chapter 3). Important issues relevant to economic restructuring can be identified throughout the book.

Statistical material is presented extensively in the book and will serve well modern curriculum objectives of promoting numerical and statistical competencies amongst students.

GENERAL INFORMATION

The ABS

The Australian Bureau of Statistics (ABS) is the central statistical authority for the Australian Government and, by arrangements with the Governments of the States, provides statistical services for those Governments. It is the central agency which collects, compiles, analyses and distributes statistics and related information. The ABS has a responsibility to provide information which supports decision making and informs the community generally.

This Publication

General inquiries concerning this publication should be referred to the Manager, Client Support, Brisbane, on (07) 3222 6155.

Comments on ways to improve this publication are welcome and should be directed to The Editor, *Measuring Australia's Economy*, Australian Bureau of Statistics, GPO Box 9817, Brisbane Qld 4001.

Chart and Table Contents

The statistics presented are the latest available at *October 1995*.

The statistics are generally presented in the charts as time series for the last 10 years of monthly or quarterly data.

The tables generally present the last 6 years of annual data along with the latest 7 quarters or 15 months of sub-annual data.

Data Sources

The tables contain mainly ABS data, although data from non-ABS sources are also included. For ABS data, the name of the source publication and its catalogue number are included in the footnotes of the charts and tables. If the data are from other sources, the source organisation's name is included in the footnotes.

Seasonally Adjusted and Trend Estimates

Data series in this publication include original, seasonally adjusted and trend series. Seasonally adjusted and trend series are clearly labelled. All other series are original series. Care should be taken in interpreting data for the most recent months and quarters. Some of the original and all of the seasonally adjusted series and trend are subject to revision. The ABS is increasingly placing emphasis on trend series, which are seasonally adjusted data, smoothed to diminish the impact of irregular components in the series.

It is not uncommon for movements in the original time series data to differ from those in seasonally adjusted and trend time series. Movements in a time series of original data may reflect several factors, including:

- longer-term changes in the item being measured (i.e. trend movements);
- short-term irregular changes;
- regular seasonal influences;
- normal 'trading', 'working' or 'pay' day patterns and
- systematic holiday effects.

Seasonal adjustment and trend estimates help the user identify the effect of these influences on the time series. Seasonal adjustment removes the effect of the last three listed influences from the data, leaving only the trend and short-term irregular movements. Trend estimates are then obtained by removing the effects of the short-term irregularities.

Constant Price Estimates

Constant price estimates in this publication refer to estimates in 1989–90 dollar terms and measure values expressed at the average prices that prevailed that year. Period to period movements in constant price estimates provide what are often called 'changes in real terms'.

Explanatory Notes

ABS publications generally contain Explanatory Notes which describe the collection methodology and data items contained therein. Because *Measuring Australia's Economy* contains statistics from numerous sources, collection methodologies and data item descriptions have not been included. Readers are directed to the Explanatory Notes contained in the appropriate ABS publications for such descriptions. Explanatory Notes in *Measuring Australia's Economy* describe each economic indicator.

Further Reading

Further reading references for each indicator are generally ABS publications. The ABS uses a catalogue numbering system to describe its publications and products. The catalogue number appears in brackets after each publication, for example, *Balance of Payments, Australia* (5303.0). A description of the catalogue numbering system can be found in the *Catalogue of Publications and Products* (1101.0). The origins of publications not from the ABS are also indicated.

Symbols and Other Usages

In all tables the following symbols mean:

n.a.	not available
n.y.a.	not yet available
p	preliminary
. .	not applicable
—	nil or rounded to zero

Yearly periods shown as, e.g. 1994–95, refer to the fiscal year ended 30 June. Where figures have been rounded, discrepancies may occur between totals and the sums of the component items.

Chapter

CHAPTER 1
MEASURING ECONOMIC ACTIVITY

A large amount of the information collected and published by the ABS records economic activity. This information is collected mainly by surveys and censuses, while some is a by-product of administrative activities, for instance, information about motor vehicles registered is regularly acquired by the ABS from State motor vehicle registration authorities.

The information collected from surveys, censuses and as administrative by-product is put together to form separate measures of activity in the economy. For instance, the turnover of retailers is compiled from a survey conducted by the ABS and the number of people employed is compiled from the ABS labour force survey. These measures are also referred to as *economic indicators*, which can be thought of as economic variables which change in a predictable way in relation to overall economic activity. Economic analysts use indicators along with other information to help explain what is happening in the economy and then use this knowledge to try to predict future events.

What the National Accounts measure

There is a wide range of data series available to anyone who wishes to describe the performance of various components of the economy over time. For example, we could look at the number of houses being built, the number of cars produced, whether employment is rising or falling, the composition of exports and so on.

While these and many other statistical series produced by the ABS and other organisations are important in their own right, it is obvious that none of them in isolation can provide a complete picture of the state of the economy. The main advantage of the *national accounts* is that they provide a framework within which data from the wide variety of sources available can be combined and presented to describe the overall economic position of the nation.

In addition, the accounts provide details of the contributions of different types of economic activity to the total within a particular period. For example, we can see from the national accounts how much of our national income is derived from exports, or how much of the national production is contributed by the manufacturing sector.

Gross Domestic Product (GDP)

The summary measure of the nation's economic position provided in the national accounts is *gross domestic product*, or *GDP*. GDP is defined as the income generated by production taking place within Australia's domestic territory. The term *gross* in GDP indicates that no deduction has been made for the consumption of fixed capital (also known as depreciation); in other words, the gradual using up of capital equipment through wear and tear is not accounted for when measuring GDP.

GDP and Social well-being

It is important to recognise that the 'performance' of the economy, as represented in national accounting measures such as growth of the national income or GDP, is not an end in itself. Movements in GDP at constant prices are an important measure of economic growth, but there is no single indicator which can describe all aspects of the well-being of a country's citizens.

There are significant aspects of the 'quality of life' which cannot be comprehended in a system of economic accounts, just as there are significant aspects of an individual's well-being which are not measured in the conventional concept (or any other concept) of that individual's income.

Notwithstanding their limitations, especially in relation to uses for which they were never designed, the national accounts provide vital information for a range of important purposes. The conventions which are followed in compiling them are fully articulated. They have been developed and refined in the course of the past half-century, by experts who understand that there are many questions which cannot be answered by any system which relies solely on the measuring rod of money (even though techniques are available for removing the effects of changes in the value of money). The system of national accounts also provides a framework or structure which can be, and has been, adapted and extended to facilitate the examination of other economic and social policy issues.

Chapter

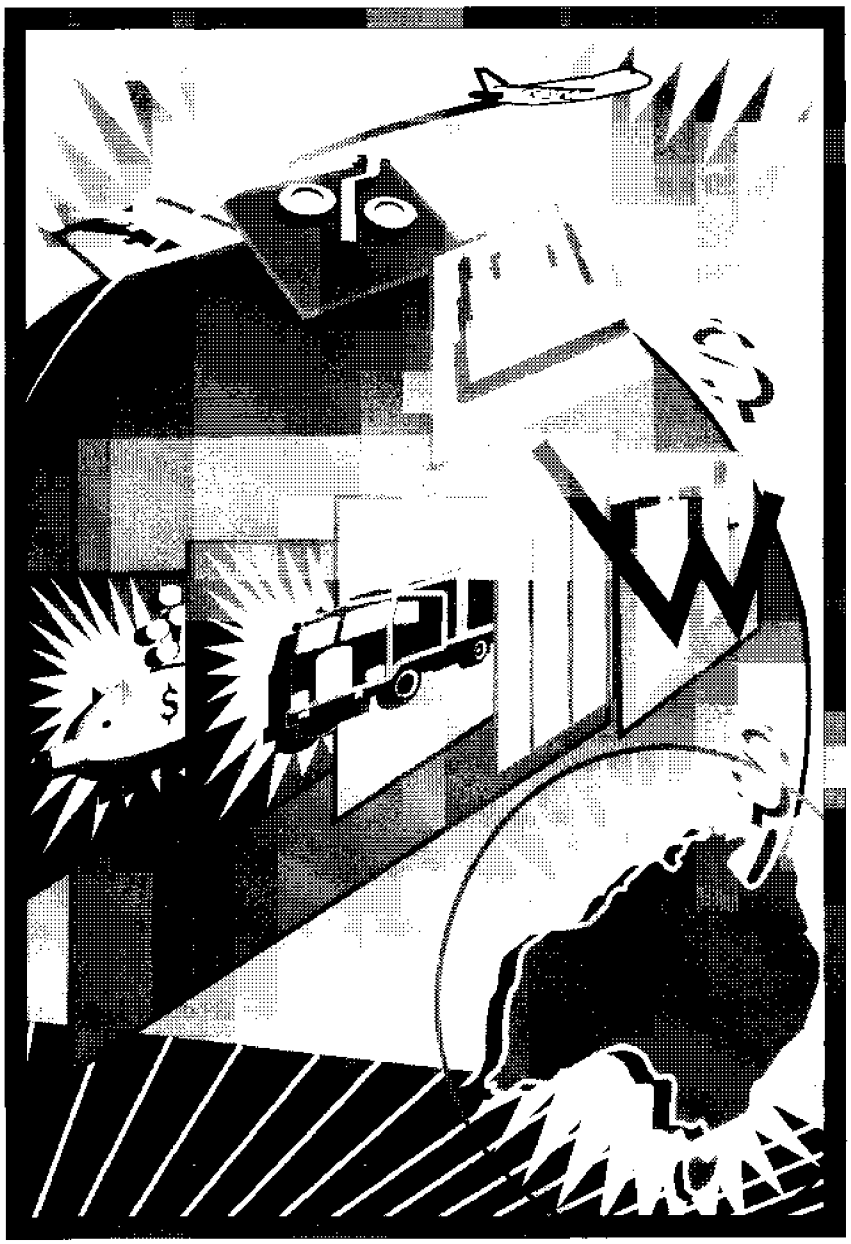
CHAPTER 2
ECONOMIC INDICATORS

It is possible to get a picture of the Australian economy by reading newspapers, journals, economic texts, academic reports and government publications.

Analysis of the economy should be based on the major economic indicators. A combination of a knowledge of economic indicators and an understanding of the social and political environment will help to assess why the economy has changed over time.

Whenever the economy is analysed, arguments should be backed up using relevant economic and other data.

Economic indicators in this publication can be used to see how the economy has changed over the last 10 years.



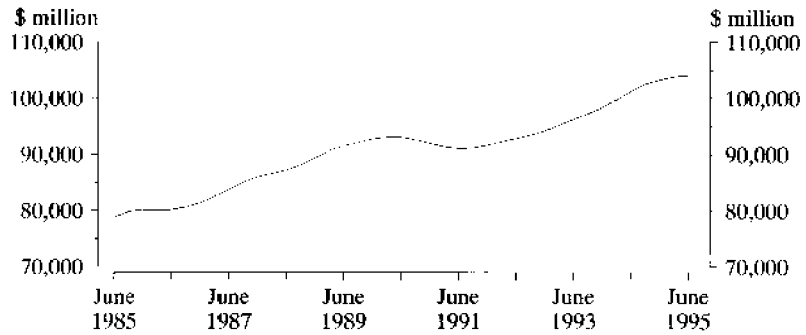
Section 2.1
Summary Measures of Economic Activity

2.1.1 Gross Domestic Product

Comment

The Australian economy experienced growth through most of the mid-to-late 1980s with the exception of March quarter 1986 which recorded a slight decrease in Gross Domestic Product GDP(A) trend at constant prices. This was followed by a sustained decline in economic activity (a recession) from June quarter 1990 to June quarter 1991, with five quarterly decreases in GDP(A), lasting longer than the 1982–83 recession. Since then, continued growth in GDP(A) has been recorded although the rate of growth slowed from 1.6% in June quarter 1994 to 0.5% in June quarter 1995.

GROSS DOMESTIC PRODUCT, GDP(A) AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

MEASURES OF GROSS PRODUCT AT AVERAGE 1989–90 PRICES
($ million)

Period	*GDP(I) income based*	*GDP(E) expenditure based*	*GDP(P) production based*	*GDP(A) average*
		ANNUAL		
1989–90	371,051	366,878	371,051	369,661
1990–91	366,666	365,136	366,519	366,108
1991–92	367,712	372,399	365,457	368,522
1992–93	379,231	384,371	377,088	380,229
1993–94	396,650	398,620	392,591	395,954
1994–95	414,513	413,751	416,107	414,789
		QUARTERLY — TREND		
1993–94				
December	98,320	98,985	97,298	98,201
March	99,646	100,669	98,872	99,729
June	101,301	102,025	100,739	101,355
1994–95—				
September	102,612	102,685	102,379	102,559
December	103,362	103,217	103,526	103,368
March	103,870	103,838	104,451	104,053
June	104,172	104,367	105,272	104,604

Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

Gross domestic product (GDP) is an aggregate measure of the value of economic production in Australia in a given period.

Three independent measures of GDP are produced each quarter. They are the sum of goods and services produced at each stage of production less the costs of production, **GDP(P)**; the sum of incomes generated by production, **GDP(I)**; and the sum of final expenditure on goods and services produced, plus exports minus imports, **GDP(E)**. A fourth measure of GDP, calculated as the average of the above three, is referred to as **GDP(A)**.

Analysis has shown that *constant price* GDP(A) has provided the most satisfactory indicator of short-term seasonally adjusted or trend growth in GDP.

The preferred *current price* measure of GDP is GDP(I). It is the overall measure which is consistent with subsidiary measures, such as national income and data in the other consolidated tables (for example, the national income and outlay account). GDP(I) also provides the base year benchmarks for the constant price estimates of GDP(P). Before the introduction of GDP(A) in 1990, constant price GDP(I) had traditionally been the most prominent and commonly-used measure of economic growth in Australia.

Further Reading

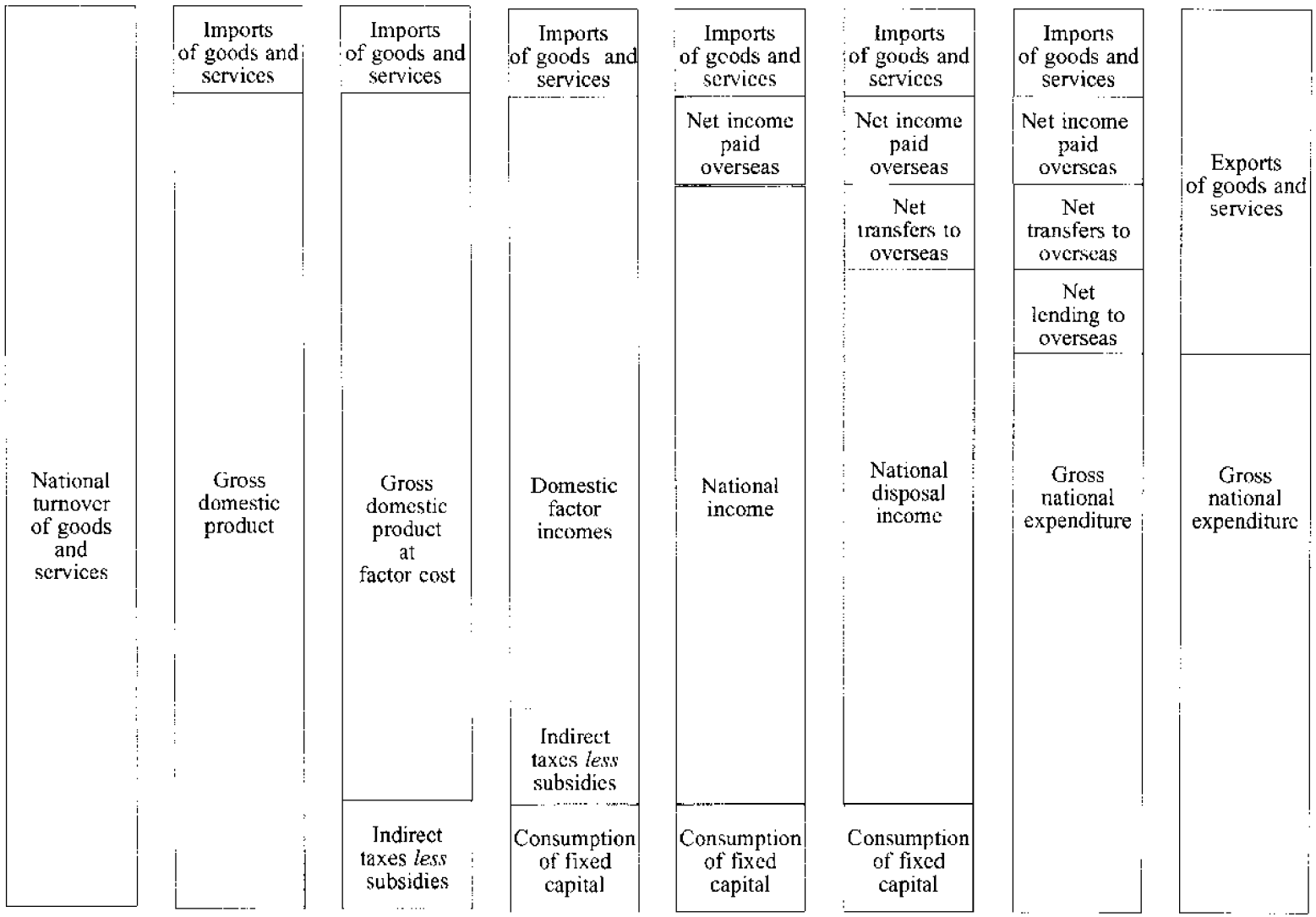
- ☐ *Australian Economic Indicators* (1350.0)
  See feature article in the May 1994 issue, 'Real Estimates in the National Accounts'.

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Provides detailed presentation of quarterly national accounts at both current prices and average 1989–90 prices in original, seasonally adjusted and trend terms.

- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

NATIONAL ACCOUNTS
RELATIONSHIP OF MAIN AGGREGATES



Explanatory Notes

The essential function of the national accounts is to provide a systematic summary of national economic activity. The structure of the national income and expenditure accounts provides an economically meaningful aggregation of the wide range of diverse transactions occurring in the economy and the various entities (transactors) involved in those transactions.

The basic structure of the national accounts is determined by the classification of transactors into institutional sectors and the classification of transactions firstly by economic type and secondly grouped to form accounts. The four domestic institutional sectors grouped according to their roles, (with the emphasis being on the differences in their financial behaviour in the economy) are: corporate trading enterprises; financial enterprises; households and general government.

The types of accounts reflect the major economic processes occurring in the economy, namely production, the distribution of incomes, consumption, saving and investment. Accordingly, they reflect the key economic flows of the Keynesian system. The national income and expenditure accounts are composed of three major types of accounts:

- production accounts;
- income and outlay accounts and
- capital accounts.

A fourth account, the overseas transactions account, records transactions between the domestic economy and the rest of the world.

Each of these accounts is produced for the nation as a whole and these four accounts form the consolidated summary accounts. An important feature of the accounts is that they are a double entry system, and therefore are fully balanced. Every entry has a counterpart entry, i.e. every outgoing reappears elsewhere as an incoming, reflecting the circularity of the economic process. However, in order to show the derivation of important aggregates, a few debit entries are shown as deductions on the credit side of the accounts.

The figure on the facing page shows how the various national accounting aggregates are related to each other. National turnover can be viewed as the *total supply of goods and services* to the market, free of duplication, in a given period. In other words, it is the total supply available in Australia to final buyers. Supply is sourced from both domestic production and imports.

The last block views national turnover as the sum of all *final expenditures* on goods and services in the same given period. These final expenditures are defined to include increases in stocks and exports, which are considered to be final expenditures from the point of view of the domestic economy.

The supply and expenditure views do not quite represent the same physical goods because goods produced in the current period may pass through stock holdings before being included in consumer and capital expenditures or in exports in subsequent periods. On the other hand, the views do represent the same services, because services are supplied and used simultaneously.

Further Reading

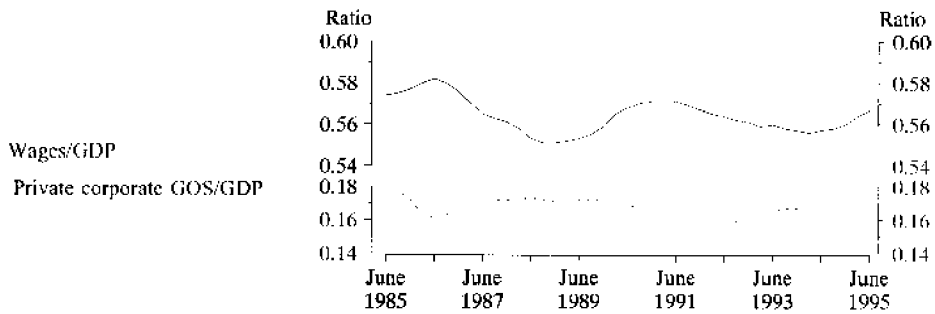
☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0) Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

2.1.3 National Accounts
Domestic Production Account

Comment

Costs of production, or the ratio of wages, salaries and supplements to GDP at factor cost, decreased from June quarter 1986 to September quarter 1988 before rising again to reach 0.57 in September quarter 1990. From then, the ratio decreased slightly and remained at or around 0.56 from September quarter 1992 to March quarter 1995. Over the same period, movement in the ratio of gross operating surplus to GDP at factor cost or income of enterprises from production, tended to display an inverse relationship to the costs of production.

PROPORTION OF WAGES, SALARIES AND SUPPLEMENTS TO GDP AT FACTOR COST, AND PROPORTION OF PRIVATE CORPORATE GROSS OPERATING SURPLUS (GOS) TO GDP AT FACTOR COST, TREND



Source: ABS 5206.0, Quarterly data

DOMESTIC PRODUCTION ACCOUNT (a)
($ million)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*1993–94*	*1994–95*
Final consumption expenditure	297,048	296,745	313,559	327,730	341,434	361,865
Gross fixed capital expenditure						
Private	67,821	60,452	56,757	62,355	69,441	76,549
Public enterprises & general government	21,658	20,789	20,583	19,398	18,006	20,541
Increase in stocks	4,922	1,895	-1,943	291	1,029	2,709
Gross national expenditure	373,449	376,181	388,956	409,774	429,910	461,664
Net exports	6,571	320	2,007	–1,413	–1,357	8,949
Gross domestic product (GDP(E))	**366,878**	**376,501**	**390,963**	**408,361**	**428,553**	**452,715**
Statistical discrepancy	4,173	1,581	4,907	5,449	–2,105	849
Gross domestic product (GDP(I))	**371,051**	**378,082**	**386,056**	**402,912**	**426,448**	**453,564**
Wages, salaries and supplements	183,438	189,711	193,659	200,263	209,951	223,155
Gross operating surplus	143,156	143,690	148,119	157,073	165,631	174,060
Gross domestic product at factor cost	326,594	333,401	341,778	357,336	375,582	397,215
Indirect taxes less subsidies	44,457	44,681	44,278	45,576	50,866	56,349
Gross domestic product (GDP(I))	**371,051**	**378,082**	**386,056**	**402,912**	**426,448**	**453,564**

(a) Data are available and published quarterly.
Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

The domestic production account is a consolidated summary account of all the production activity which takes place in Australia. The account records the expenses incurred in production and the receipts from sales of final goods and services.

On the credit side the domestic production account records receipts from sales of goods and services (including goods produced for own use) to final domestic consumers, increases in stocks and exports minus imports. The aggregation of the receipts side is referred to as expenditure on GDP, that is GDP(E).

On the debit side of the production account are recorded the costs of production including factor incomes, i.e. wages, salaries and supplements, gross operating surplus (the income of enterprises from production) and net indirect taxes paid to government. The aggregation of the payments side is referred to as GDP(I).

Conceptually, GDP(I) is equivalent to GDP(E). However, in practice, the statistical discrepancy, reflecting net errors and omissions, is the difference between these two totals. When compiling the national income and expenditure accounts it is necessary to show the statistical discrepancy as a contra entry in one of the other summary accounts. It has been included in the capital account since the Australian national accounts were first compiled in their current form.

The domestic production account is analogous to accounts used in business accounting and is, in effect, a consolidation of the trading accounts of individual enterprises from all sectors.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Detailed presentation of quarterly national accounts at both current prices and average 1989–90 prices in original, seasonally adjusted and trend terms.

- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

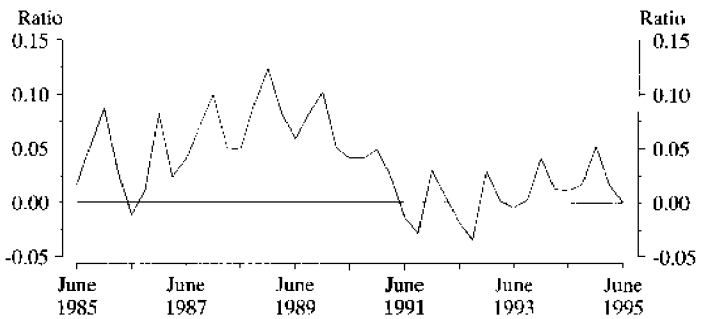
- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

2.1.4 National Accounts
Income and Outlay Account

Comment

The ratio of national saving to national disposable income in original terms, fluctuates from quarter to quarter with peaks recorded in every December quarter between 1985 and 1995. The ratio peaked in December quarter 1988 and then decreased to a low in September quarter 1992 before generally increasing again. At June quarter 1995, the ratio had decreased to zero.

PROPORTION OF NATIONAL SAVING TO NATIONAL DISPOSABLE INCOME



Source: ABS 5206.0. Quarterly data

NATIONAL INCOME AND OUTLAY ACCOUNT
($ million)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*1993–94*	*1994–95*
Wages, salaries and supplements	183,438	189,711	193,659	200,263	209,951	223,155
Net operating surplus	87,250	85,462	88,355	94,380	100,546	106,179
Domestic factor incomes	270,688	275,173	282,014	294,643	310,497	329,334
less Net income paid overseas (a)	17,428	17,616	15,424	13,597	14,097	16,092
Indirect taxes	49,056	50,469	50,295	52,032	57,357	62,644
less Subsidies	4,599	5,788	6,017	6,456	6,491	6,295
National income	297,717	302,238	310,868	326,622	347,267	369,591
less Net unrequited transfers to overseas	-2,290	–2,395	-2,195	–685	–196	–487
National disposable income	300,007	304,633	313,063	327,307	347,462	370,078
Final consumption expenditure —						
Private	217,428	229,991	242,035	253,119	264,177	282,481
Government	61,620	66,754	71,524	74,611	77,257	79,384
Saving	20,959	7,888	496	423	6,028	8,213
Disposal of income	300,007	304,633	313,063	327,307	347,462	370,078

(a) Including property income, labour income and extraordinary insurance claims from overseas.
Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

The national income and outlay account is one consolidated national account which describes the distribution of incomes in the economy. The account shows how much of the national income is spent on final consumption. That part of income which is not spent in this way is saving.

The national income and outlay account records (on the income side) wages, salaries and supplements, net operating surplus and indirect taxes less subsidies (all from the domestic production account). From this income are deducted net payments of income and miscellaneous transfers to overseas to yield national disposable income.

The outlay or disbursements side of the account shows this disposable income as being used for final consumption expenditure with the balance being the nation's saving - a source of finance for gross capital formation.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data for the last 9 quarters for the national income and outlay accounts including quarterly national income and outlay accounts for households and general government.

- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

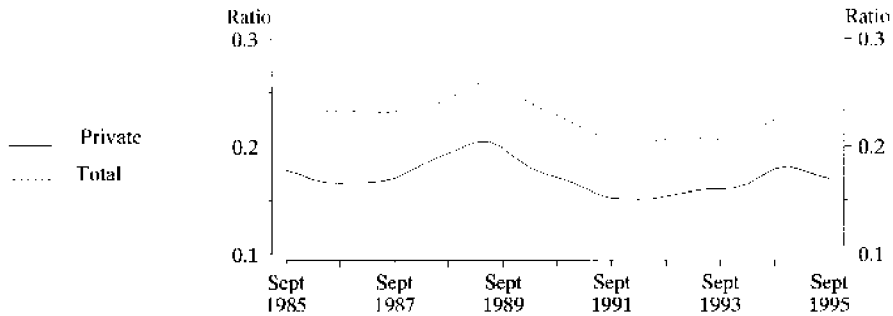
- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

2.1.5 National Accounts Capital Account

Comment

The proportion of private gross fixed capital expenditure to GDP(E) fell from 0.18 in September quarter 1985 to a low of 0.17 in September quarter 1986 before rising again to 0.20 in June quarter 1989. It then declined to a low of 0.15 in March quarter 1992 but recovered subsequently reaching 0.17 in December quarter 1994. The proportion of total gross fixed capital expenditure to GDP(E) substantially reflects the movements in the private sector.

PROPORTION OF PRIVATE AND TOTAL FIXED CAPITAL EXPENDITURE TO GDP(E) AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

NATIONAL CAPITAL ACCOUNT
($ million)

	1989–90	*1990–91*	*1991–92*	*1992–93*	*1993–94*	*1994–95*
Consumption of fixed capital	55,906	58,228	59,764	62,693	65,085	67,881
Other saving (a)	–2,815	–7,623	–1,865	3,941	8,086	8,911
Household saving	15,937	13,792	12,641	11,433	12,405	8,675
General government surplus on current transactions	7,837	1,719	11,272	–15,797	–14,462	–9,373
Finance of gross accumulation	*76,865*	*66,116*	*59,268*	*62,270*	*71,113*	*76,094*
Gross fixed capital expenditure —						
Private —						
Dwellings	18,633	17,351	17,505	20,062	23,081	24,680
Non–dwelling construction	16,768	14,400	11,333	10,233	10,700	11,288
Equipment	27,252	24,252	23,256	27,152	29,875	35,035
Real estate transfer expenses	5,168	4,539	4,663	4,908	5,785	5,546
Public enterprises	13,029	12,006	11,769	10,146	9,261	11,329
General government	8,629	8,783	8,814	9,252	8,745	9,212
Total	*89,479*	*81,331*	*77,340*	*81,753*	*87,447*	*97,090*
Increase in stocks	4,922	–1,895	–1,943	291	1029	2,709
Statistical discrepancy	4,173	1,581	–4,907	–5,449	–2,105	849
Net lending to overseas	–21,709	14,901	–11,222	–14,325	–15,258	–24,554
Gross accumulation	76,865	66,116	59,268	62,270	71,113	76,094

(a) Increase in income tax provisions, undistributed income and extraordinary insurance claims paid.
Source: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0).

Explanatory Notes

The national capital account shows how the saving from the national income and outlay account is used to finance gross fixed capital expenditure. This account thus shows the saving and investment flows taking place in the economy.

If, as is currently the case in Australia, the nation's saving is not sufficient to pay for all the capital equipment needed for Australian production, the shortfall must be borrowed from overseas. The amount borrowed from overseas is shown in the national capital account as a negative entry for *net lending to overseas*.

The equality of investment and saving follows from the fact that saving is that part of the national income which is not spent on consumption while investment is that part of the domestic product which is not consumed.

The national capital account shows, on the receipts side, consumption of fixed capital transferred from the domestic production account and saving transferred from the national income and outlay account.

On the payments side are purchases by all sectors of new buildings, structures and equipment, the increase in stocks of all sectors and a balance described as *net lending to overseas*.

In principle, the sum of net lending for all domestic sectors is equal to the nation's net lending to overseas. However, in practice, net lending for each sector is derived as a balancing item and therefore includes each sector's share of the statistical discrepancy, which represents net errors and omissions in the accounts.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data for the last 9 quarters for the national capital account as well as other national accounting aggregates.

- ☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

- ☐ *Australian National Accounts: Financial Accounts* (5232.0)
  Contains information on the level (stock) of financial assets and liabilities of each sector of the economy and transactions (flow of funds) between the sectors.

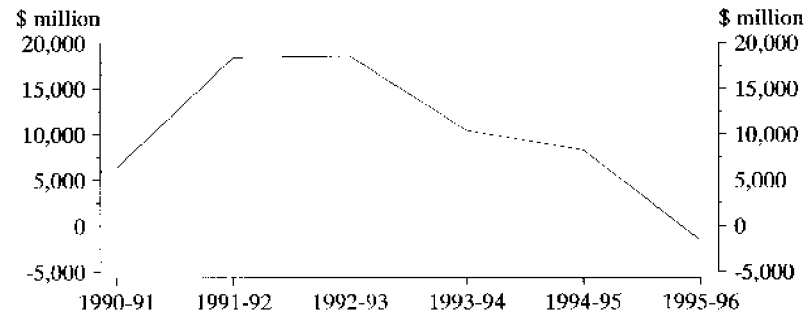
- ☐ *A Guide to Australian National Accounts* (5235.0)
  Explains the most important features of the Australian national accounts and provides a very basic understanding of the meaning and uses of these statistics.

2.1.6 Government Financial Estimates

Comment

Economic transactions for all levels of governments combined are expected to change from a deficit of $8,229m in 1994–95 to an expected surplus of $1,618m in 1995–96. A deficit was recorded for all levels of government for the period 1990–91 to 1994 95.

DEFICIT
COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED



Source: ABS 5501.0, Annual data

ECONOMIC TRANSACTIONS OF COMMONWEALTH, STATE, TERRITORY AND LOCAL GOVERNMENTS COMBINED
($ million)

Period	*Total current outlays*	*Total capital outlays*	*Total outlays*	*Total revenue*	*Total financing (a)*	*Deficit (b)*
			ANNUAL			
1990–91	128,708	22,182	150,890	139,647	11,243	6,391
1991–92	137,591	22,640	160,232	135,414	24,818	18,362
1992–93	144,797	18,832	163,629	139,097	24,533	18,517
1993–94	152,351	13,003	165,354	149,530	15,824	10,436
1994–95	157,932	18,404	176,336	160,502	15,834	8,229
1995–96 (c)	167,384	13,678	181,062	176,399	4,662	–1,618

(a) Financing is the difference between total outlays, and revenue and grants received. (b) Deficit/surplus comprises financing less increase in provisions. (c) Forward estimate.
Source: ABS, Government Financial Estimates, Australia (5501.0)

Explanatory Notes

Government financial estimates provide forecasts of outlays and revenue for the current financial year (the budget year) and estimates of actual expenditure and revenue for previous years. The estimates cover both government organisations mainly funded from taxation (called general government) and government enterprises providing goods and services for the market (public trading enterprises).

The estimates are compiled from Commonwealth and State government budgets which are usually presented in May to September each year, and from estimates supplied by individual authorities not funded directly from the budget (e.g. electricity authorities, public transport authorities, statutory authorities and local government authorities).

Government finance statistics can be used to monitor fiscal policy. When government increases its spending, for example when it increases pensions and benefits paid to households, there is a tendency for aggregate demand to rise. A similar effect can be obtained by reducing taxation so that more money remains in the hands of private consumers. Conversely, government can reduce expenditure or increase taxes in an attempt to reduce demand.

Financing is a measure of the means by which governments fund any shortfall of receipts over payments. This financing will affect the level of government debt. The deficit (surplus) is a broad indication of the level of financing required.

Further Reading

- ☐ *Government Financial Estimates, Australia* (5501.0)
  Contains outlays, revenue and financing transactions for all levels of government covering the forward (or budget) year and the previous 5 years.

- ☐ *Government Finance Statistics, Australia* (5512.0)
  Provides annual details of the consolidated financial transactions of the non-financial public sector for all levels of government.

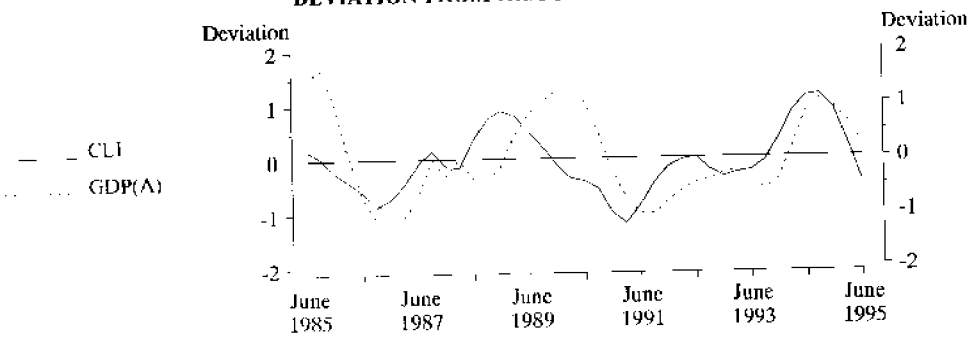
- ☐ *Public Sector Financial Assets and Liabilities, Australia* (5513.0)
  Contains annual statistics on the financial assets and liabilities of the Australian non-financial public sector.

2.1.7 Composite Leading Indicator

Comment

On average during the 1970s and 1980s, the Composite Leading Indicator (CLI) led turning points in GDP(A) growth cycle by around two quarters, but the lead time for peaks and troughs varied considerably. The last turning point in the CLI is now coincident with the last turning point in GDP(A)'s deviations from its historical long-term trend. Allowing for the timing at which economic indicators were published, the latest peak was predicted by the CLI around 5 months ahead. In June quarter 1995, the CLI fell 0.73%.

CLI AND GDP(A)
DEVIATION FROM HISTORICAL LONG-TERM TREND



Source: ABS 1350.0, Quarterly data

CLI AND GDP(A)
DEVIATION FROM LONG TERM TREND

Period	*CLI deviation from long-term trend*	*CLI change from previous quarter*	*GDP(A) deviation from long-term trend*	*GDP(A) change from previous quarter*
		QUARTERLY		
1993–94—				
December	0.34	0.43	0.40	0.20
March	0.83	0.49	0.17	0.57
June	1.12	0.29	0.84	0.67
1994–95–				
September	1.15	0.03	1.07	0.23
December	0.87	–0.28	0.92	0.16
March	0.25	–0.62	0.63	0.29
June	0.47	–0.73	0.22	–0.41

Source: ABS, Australian Economic Indicators (1350.0).

Explanatory Notes

The Australian Bureau of Statistics has developed an experimental Composite Leading Indicator (CLI) which summarises the early signals contained in a selection of economic indicators. The CLI is designed to help in the detection of turning points between successive expansions and slowdowns in economic activity.

The CLI is a single time series produced by aggregating economic indicators which give a balanced coverage of several aspects of economic activity. These aspects are monetary policy (real interest rates), a measure of terms of trade (ratio of commodity prices to import prices), external demand (US GDP), pressures on production capacity (job vacancies), internal demand (housing finance), market confidence (the All Industrials Index) and entrepreneurs' expectations.

The expansion and contraction phases identified in a business cycle are periods of rise and fall in economic activity relative to the historical long-term trend of constant price GDP(A). Constant price GDP(A) is the reference measure of economic activity used by most decision makers in Australia.

The CLI is expressed in terms of deviation from the long-term trend in GDP(A). It is designed so that the direction of its growth indicates the likelihood of an expansion or a slowdown relative to the historical long-term trend in GDP(A) in the next 1 to 6 quarters. The mean lead time of the CLI is about 2 quarters.

The primary use of the CLI is for the detection of turning points in the business cycle, not in forecasting the level of any measure of economic activity.

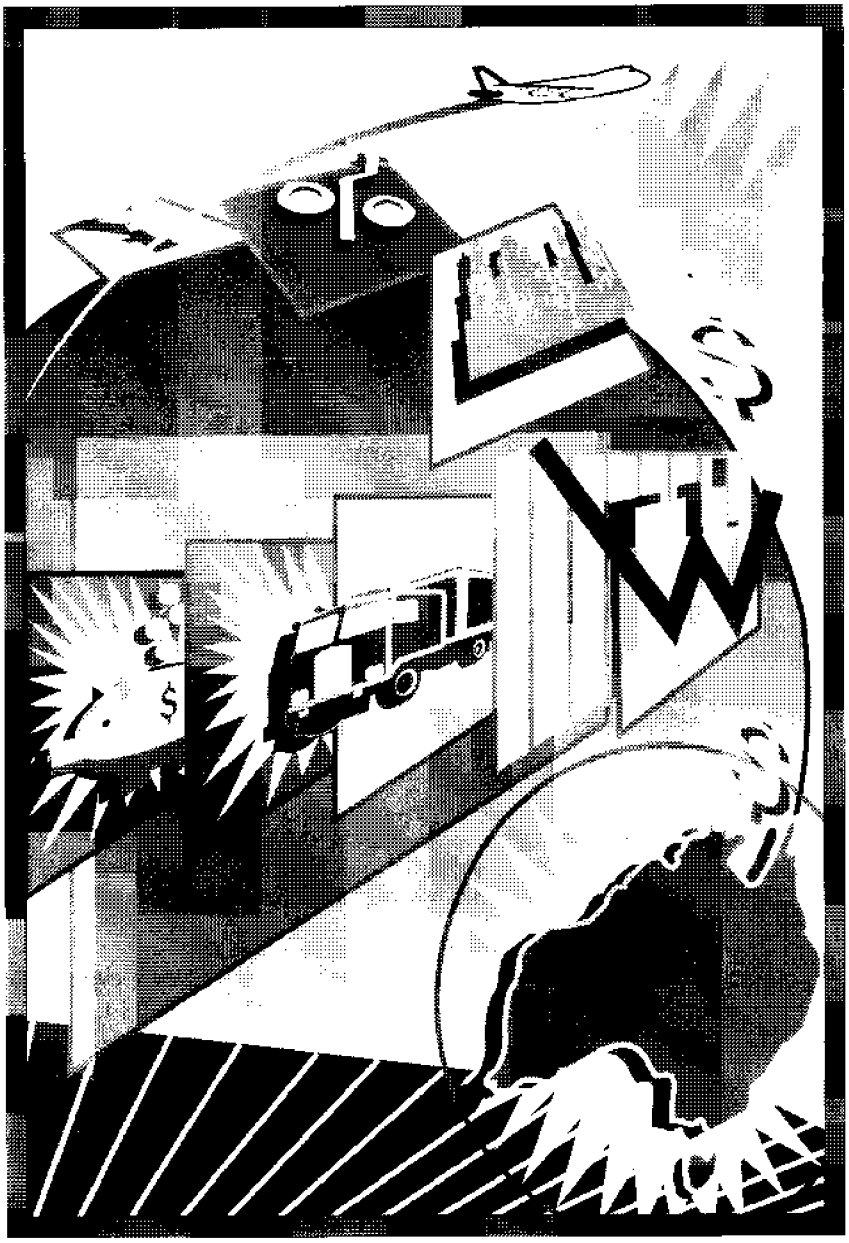
The ABS conducts a survey of business expectations to give a short and medium term, quantitative measure of the expected change of a number of business performance indicators. Results are available in *Australian Business Expectations* (5250.0), described in the Further Reading section below.

Further Reading

- ☐ Information Paper: *An Experimental Composite Leading Indicator of Australian Economic Activity* (1347.0)
  This information paper describes the nature and construction of a new experimental leading indicator of Australian economic activity.

- ☐ *Australian Economic Indicators* (1350.0)
  The Composite Leading Indicator is released every quarter and is published in Australian Economic Indicators.

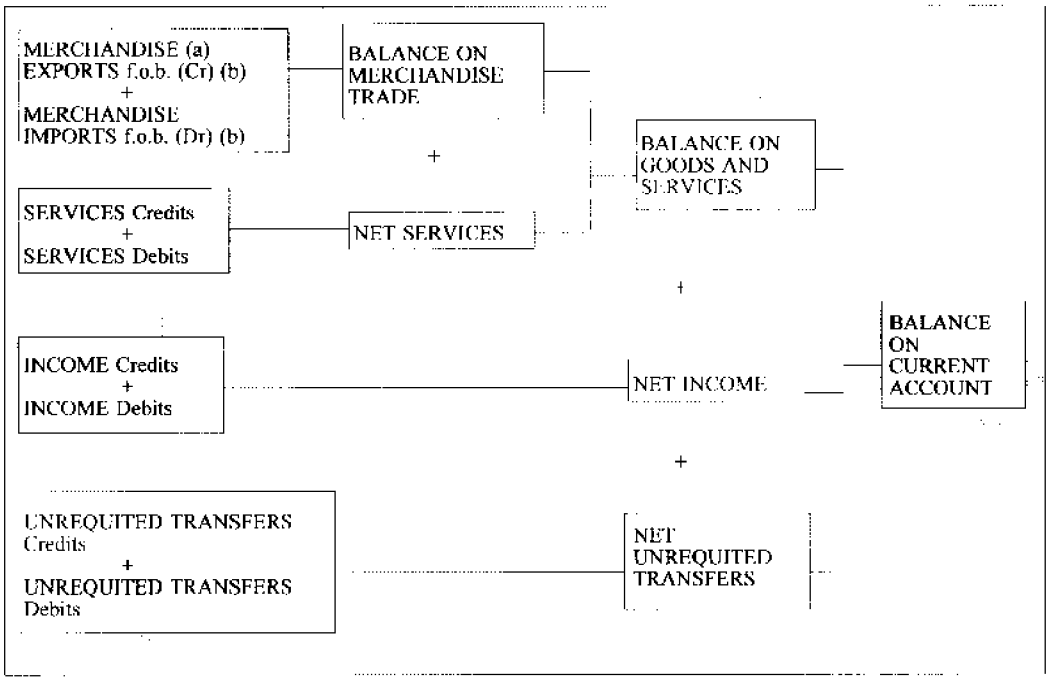
- ☐ *Australian Business Expectations* (5250.0)
  Contains estimates of future economic activity based on the business expectations of 3,000 businesses operating in Australia. Estimates, by industry, of the expected changes are presented for a range of performance indicators covering trading performance, stocks, capital expenditure, employment, operating expenses and international trade.



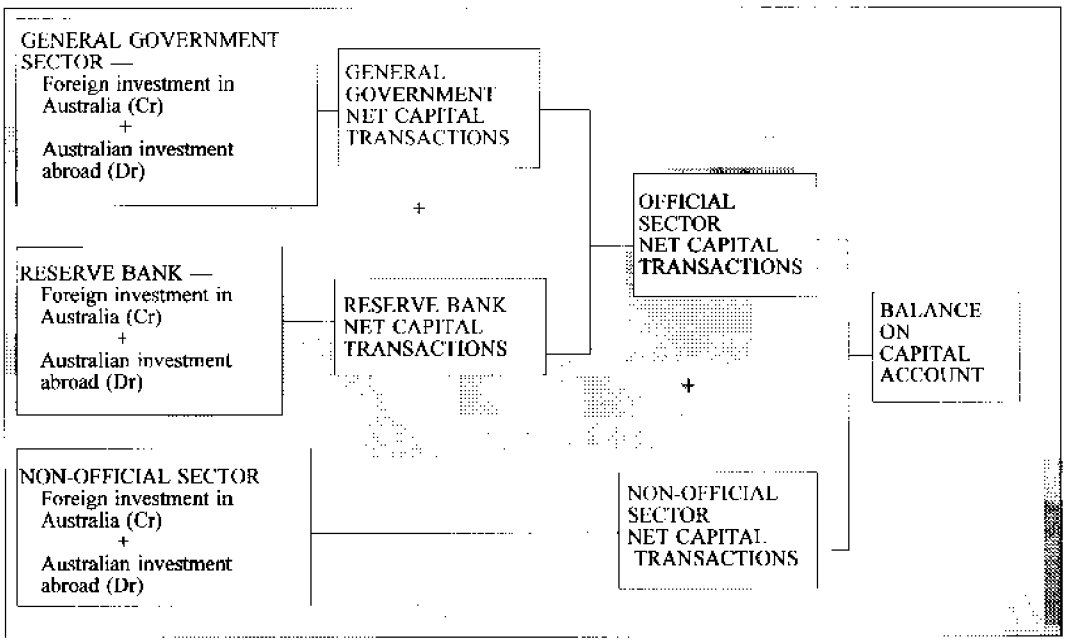
Section 2.2
International Accounts and Trade

2.2.1 Balance of Payments

CURRENT ACCOUNT



CAPITAL ACCOUNT



(a) Balance of Payments basis. (b) Merchandise is valued at the point of free on board (f.o.b.) at the customs frontier of the exporting country.

Explanatory Notes

The balance of payments is a statistical statement designed to provide a systematic record of Australia's economic transactions with the rest of the world. All these transactions, which usually involve dealings between an Australian resident and a non-resident, are entered in a set of double entry accounts which make up the balance of payments. It is the use of the double entry system that enables *balances* to be derived, but the balance of payments cannot be summarised in just a single balance.

The *current account* measures exports and imports of *goods and services*, *income* receivable and payable abroad as well as *unrequited transfers*. Current account transactions are recorded on a gross basis, meaning that all individual credit and debit transactions are recorded.

The *capital account* records transactions in *financial assets and liabilities* (such as borrowing, shares, bonds, loans, etc.) between residents and non-residents. Capital transactions are usually shown on a net basis, meaning that only net increases/decreases in Australia's assets abroad and net increases/decreases in Australia's liabilities to non-residents are recorded. For example, purchases and sales of bonds issued by an enterprise would be netted.

In principle, the deficit (or surplus) on the current account should be matched by a surplus (or deficit) on the capital account. In practice, this is not the case. The balances on the capital account and the current account are reconciled by the *balancing item*. This is the sum of net errors (transactions not measured accurately) and net omissions (transactions not measured at all).

Further Reading

- ☐ *Balance of Payments, Australia* (5301.0)
  Contains monthly data on the principal balance of payments aggregates, including trend and seasonally adjusted series.

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted, trend and constant price estimates of the current account.

- ☐ *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0)
  Provides a comprehensive description of the concepts and structure of the Australian balance of payments and of the data sources and methods used to compile the statistics contained in Australian balance of payments publications.

- ☐ *A Guide to Balance of Payments Statistics* (5362.0)
  Contains general concepts and practices involved in the Australian Balance of Payments. Provides a basic explanation of data sources, methods and uses of balance of payments statistics.

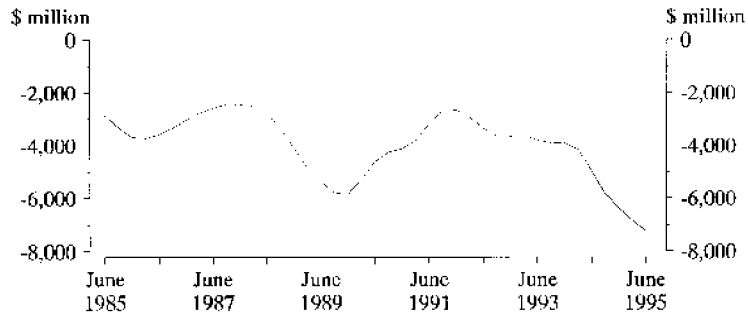
- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.2 Balance of Payments Current Account

Comment

In trend estimate terms, Australia's balance on current account declined to a low of –$5,840m in December quarter 1989. During the 8 quarters following this, the balance improved, reaching –$2,667m in December quarter 1991. More recently, the balance on current account has deteriorated to –$7,246m in June quarter 1995.

BALANCE ON CURRENT ACCOUNT, TREND



Source: ABS 5302.0, Quarterly data

BALANCE OF PAYMENTS, CURRENT ACCOUNT
($ million)

Period	*Balance on current account*
ANNUAL	
1989–90	–21,473
1990–91	–15,341
1991–92	–11,370
1992–93	–14,664
1993–94	–16,841
1994–95	–26,855
QUARTERLY — TREND	
1993–94—	
December	–3,889
March	–4,157
June	–4,951
1994–95	
September	5,812
December	6,383
March	6,796
June	–7,246

Source: ABS, Balance of Payments, Australia (5302.0).

Explanatory Notes

The balance on current account is the sum of the balances on merchandise trade, services trade, income and unrequited transfers. The balances are derived by calculating the difference of credit entries, which are shown without sign, and debit entries, which have a negative sign. If the sum of the balances is negative, a nation has a current account deficit, while if the figure is positive, a nation has a current account surplus.

The balance on current account consists of:

- Balance on goods and services: the difference between the total export value and the total import value of goods and services. It should be noted that within the balance on goods and services there is a net services balance and a merchandise trade balance which provides an analytically useful division between services and goods;
- Net income: the difference between the value of income, such as dividends and interest earned by residents from non-residents (credits) and that payable by residents to non-residents and
- Net unrequited transfers: the difference between unrequited transfer credits and debits. An unrequited transfer is needed when real or financial resources are provided without something of economic value being received in return. For example, Australia's foreign aid abroad requires a debit entry while an immigrant who brings foreign exchange to Australia adds a credit entry to unrequited transfers.

Australia has had a current account deficit since the mid–1970s. This indicates that the nation as a whole has been consuming and investing more than the available national income and savings levels. To fund this shortfall, Australia has had to acquire finance from non-residents. These capital inflows are measured in the capital account of the balance of payments. The net capital inflow (inflows less outflows) in a period is in principle equal and offsetting to the deficit on the current account of the balance of payments in that period. The extent to which they differ is taken up in the balance of payments *balancing item* which is a measure of net errors and omissions in the accounts.

The continued capital account surpluses have contributed to Australia's net foreign debt. Interest repayments on this debt are the major cause of Australia's large net income deficits which, in turn, represent a substantial component of Australia's current account deficits.

Further Reading

☐ *Balance of Payments, Australia* (5302.0)
Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted, trend and constant price estimates of the current account.

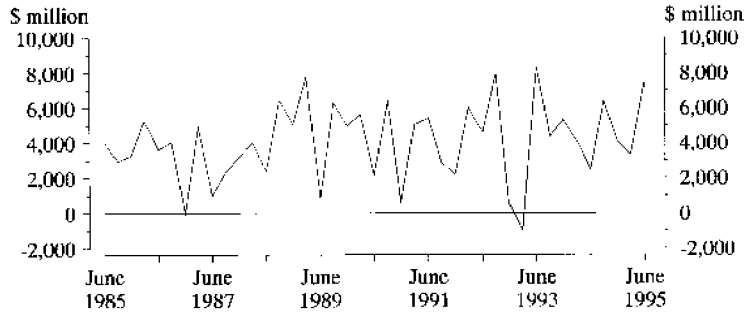
☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.3 Balance of Payments Capital Account

Comment

The balance on the capital account, in original terms, changes markedly from quarter to quarter. The balance on the capital account usually records a surplus, and reached its highest ever quarterly level in June quarter 1993. This surplus was preceded in March quarter 1993 by a small capital account deficit. This volatility reflects, in part, the huge gross flows which underlie the balance on capital account and the difficulties associated with recording them in the correct time period. This in turn, is reflected in the volatility and size of the balancing item. In June quarter 1995, the balance on the capital account had again risen to a relatively high level.

BALANCE ON CAPITAL ACCOUNT



Source: ABS 5302.0, Quarterly data

BALANCE OF PAYMENTS, CAPITAL ACCOUNT
($ million)

Period	*Balance on capital account*
ANNUAL	
1989–90	19,087
1990–91	17,561
1991–92	15,711
1992–93	15,930
1993–94	16,323
1994–95	21,297
QUARTERLY	
1993–94	
December	5,330
March	4,128
June	2,479
1994–95—	
September	6,375
December	4,082
March	3,339
June	7,501

Source: ABS, Balance of Payments Australia (5302.0).

Explanatory Notes

The capital account provides information on transactions in Australia's foreign financial assets and liabilities, such as foreign borrowing and lending by Australian residents, equity investments, and purchases and sales of official reserve assets.

The flows covered by the account are grouped into two major categories:

- Official capital, that is, transactions involving State and Commonwealth governments and the Reserve Bank; and
- Non-official capital, that is, transactions involving financial enterprises, non-financial trading enterprises and households. Government-owned financial and trading enterprises, such as Telstra are included in the non-official sector.

Credit entries in the capital account are net inflows, resulting from a reduction in Australian investment abroad and/or an increase in foreign investment in Australia. Debit entries are net outflows and reflect the reverse situation. Like the current account, credit entries are shown without sign while debit entries have a negative sign.

A positive capital account balance (a net inflow) occurs when the increase in Australia's liabilities to foreign countries (or the reduction in claims on foreign countries) in a period exceeds the increase in Australia's claims on foreign countries (or the reduction in liabilities to foreign countries).

In principle, such a net inflow of capital occurs when a country has a current account deficit. In other words, to finance this deficit, it draws on savings from the rest of the world.

A negative capital account balance (a net outflow) occurs when the increase in Australia's claims on foreign countries (or the reduction in liabilities to foreign countries) in a period exceeds the increase in its liabilities to foreign countries (or the reduction in claims on foreign countries).

In principle, such a net outflow of capital occurs when a nation has a current account surplus. In other words, the net outflow for nations with such a surplus represents the extent to which they provide their domestic savings to the rest of the world.

Further Reading

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted, trend and constant price estimates of the current account.

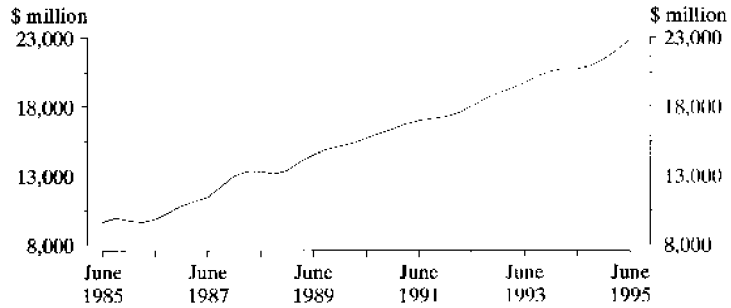
- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.4 Exports of Goods and Services

Comment

In trend terms, Australia's total exports of goods and services increased during most of the mid–1980s to the mid 1990's. Overall, the major contributing factors to this increase were non-rural merchandise exports and services credits. Falls in exports were recorded in December 1985 and March 1986 quarters and in June and September quarters 1988. Since then, exports have recorded an upward trend.

TOTAL EXPORTS OF GOODS AND SERVICES AT CURRENT PRICES, TREND



Source: ABS 5302.0, Quarterly data

EXPORTS OF GOODS AND SERVICES AT CURRENT PRICES
($ million)

Period	*Merchandise exports f.o.b. (a) total*	*Services credits*	*Total*
	ANNUAL		
1989–90	48,564	12,417	60,981
1990–91	52,155	14,122	66,277
1991–92	54,874	15,123	69,997
1992–93	60,022	16,422	76,444
1993–94	63,852	18,688	82,540
1994–95	66,496	20,373	86,869
	QUARTERLY — TREND		
1993–94—			
December	15,948	4,651	20,599
March	16,032	4,719	20,751
June	15,961	4,819	20,780
1994–95			
September	16,027	4,904	20,931
December	16,394	5,007	21,401
March	16,943	5,135	22,078
June	17,565	5,294	22,859

(a) Balance of payments basis.
Source: ABS, Balance of Payments, Australia (5302.0).

Explanatory Notes

Exports are goods and services that are provided to foreign residents. In the balance of payments they appear as a credit item on the current account and are presented separately to assist analysis.

In balance of payments publications, exports of goods are categorised as merchandise exports and classified into rural and non-rural exports. Within each of these classifications a further, more specific break-up, is published so that the trading performance of different commodity groups can be monitored. The term merchandise exports refers to all movable goods which change ownership from residents to non-residents. These are valued in f.o.b. (free on board) terms which means that transportation and insurance costs are excluded.

Exports of services are services provided by Australian residents to non-residents. These are shown in the balance of payments as services credits and categorised into groups such as shipment, other transportation, travel and other services. More detailed breakdowns are provided under each of these categories.

Exports are important because they are an added source of income for domestic producers and because they provide the foreign exchange needed to pay for imports. Export levels are dependent on the demand for Australian products and services in the world market and on the price charged for those goods and services. This price can alter if there are fluctuations in the exchange rate of the Australian dollar. If the Australian dollar depreciates (falls in value), Australian exports will generally become cheaper for foreign residents and consequently they may demand more Australian goods and services. Alternatively, if the Australian dollar appreciates (rises in value), Australian exports will generally become more expensive for foreign residents and they may demand less of our goods and services as a result.

Further Reading

- *Balance of Payments, Australia* (5302.0)
  Presents detailed quarterly data on exports of goods and services in original and seasonally adjusted terms at both current and constant prices.

- *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides annual information on exports of goods and services, including detailed breakdown of services exports by commodity and partner country.

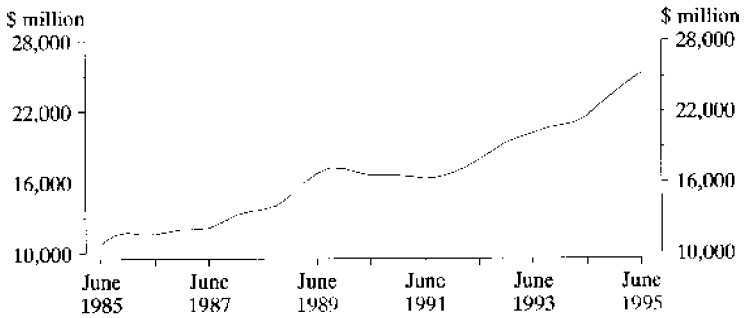
- *International Merchandise Trade, Australia* (5422.0)
  Provides quarterly information on the value of exports of goods with selected countries and country groups classified by commodity and details of exports by State. Historical data for the latest 12 years are also included.

2.2.5 Imports of Goods and Services

Comment

In trend terms, total imports of goods and services generally rose over the period between June quarter 1986 and September quarter 1989, with the strongest increase taking place after September quarter 1988. From September quarter 1989, imports of goods and services slightly declined until June quarter 1991. Since then, they have been increasing steadily.

TOTAL IMPORTS OF GOODS AND SERVICES AT CURRENT PRICES, TREND



Source: ABS 5302.0. Quarterly data

IMPORTS OF GOODS AND SERVICES AT CURRENT PRICES
($ million)

Period	*Merchandise imports f.o.b. (a)*	*Services debits*	*Total*
	ANNUAL		
1989–90	50,992	16,560	67,552
1990–91	49,244	16,713	65,957
1991–92	51,055	16,935	67,990
1992–93	59,427	18,430	77,857
1993–94	64,400	19,497	83,897
1994–95	74,696	21,122	95,818
	QUARTERLY — TREND		
1993–94–			
December	15,926	4,858	20,784
March	16,113	4,903	21,016
June	16,683	4,929	21,612
1994–95–			
September	17,512	5,034	22,546
December	18,321	5,202	23,523
March	19,037	5,381	24,418
June	19,714	5,540	25,254

(a) Balance of payments basis.
Source: ABS, Balance of Payments, Australia (5302.0).

Explanatory Notes

Imports are goods and services that are acquired from foreign residents. Other things being equal, an increase in imports will increase a current account deficit or reduce a current account surplus.

In balance of payments publications, imports of goods are referred to as merchandise imports and include all movable goods that change ownership from non-residents to residents. These imports are valued in f.o.b. (free on board) terms, which excludes the transportation and insurance costs (considered to be services) of bringing the goods to Australia. Merchandise imports are classified into three end use categories; *consumption goods*, *capital goods* and *intermediate and other goods*, which in turn are broken down into broad commodity groups such as food, chemicals, textiles, metals and metal manufactures, machinery, transport equipment, other manufactures and other imports.

Imports of services are services provided by non-residents to Australian residents. These are shown in the balance of payments as services debits and categorised into groups such as shipment, other transportation, travel and other services. More detailed breakdowns are provided under each of these categories.

Further Reading

- *Balance of Payments, Australia* (5302.0)
  Presents detailed quarterly data on the balance on goods and services for the last 10 quarters. Historical summaries of the latest 16 years are also included.

- *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

- *Merchandise Imports, Australia: Balance of Payments Basis* (5320.0)
  Provides the earliest release of monthly measures of merchandise imports on a balance of payments basis. Provides statistics under three end use categories (consumption goods, capital goods and intermediate and other goods), for 15 months and 3 years.

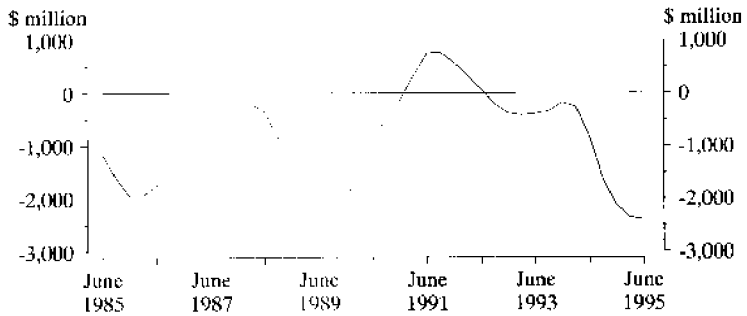
- *International Merchandise Trade, Australia* (5422.0)
  Provides quarterly information on the value of imports of goods with selected countries and country groups classified by commodity and details of imports by State. Historical data for the latest 12 years are also included.

2.2.6 Balance on Goods and Services

Comment

Australia's balance on goods and services, in trend terms, deteriorated rapidly from March quarter 1988 to reach a deficit of $2,297m in September quarter 1989. A strong improvement in the balance of goods and services was recorded after September quarter 1989, eventually reaching a surplus of $760m in September quarter 1991. From March quarter 1994, the balance of goods and services again deteriorated rapidly and by June quarter 1995 had reached a deficit of $2,395m.

BALANCE ON GOODS AND SERVICES AT CURRENT PRICES, TREND



Source: ABS 5302.0. Quarterly data

BALANCE ON GOODS AND SERVICES AT CURRENT PRICES
($ million)

Period	*Balance on merchandise trade*	*Net services*	*Balance on goods and services*
	ANNUAL		
1989–90	–2,428	4,143	6,571
1990–91	2,911	2,591	320
1991–92	3,819	1,812	2,007
1992–93	595	2,008	1,413
1993–94	548	–809	1,357
1994–95	-8,200	–749	8,949
	QUARTERLY — TREND		
1993–94—			
December	22	–207	-185
March	-81	–184	–265
June	722	–110	-832
1994–95			
September	–1,485	–130	–1,615
December	–1,927	–195	–2,122
March	–2,094	–246	–2,340
June	–2,149	–246	–2,395

Source: ABS, Balance of Payments, Australia (5302.0).

Explanatory Notes

The balance on goods and services refers to the net sum of exports and imports of goods and services. It is a useful and immediate indicator of a nation's overall trading position and appears in the current account section of the balance of payments.

A net debit (–) figure is referred to as a goods and services deficit and indicates that total imports of goods and services exceed total exports of goods and services. A surplus on the balance of goods and services appears as a credit item and indicates that total exports of goods and services exceed total imports of goods and services.

Within the balance on goods and services two other balances are presented, reflecting the division between goods and services.

Net services is the net sum of services credits (exports) and debits (imports) and identifies the extent of any surplus or deficit (–) in the trade of services.

The balance on merchandise trade is the net sum of merchandise exports and merchandise imports. A merchandise trade surplus indicates that exports of merchandise exceeded imports of merchandise in the reference period and is shown as a credit in the balance of payments. A trade deficit is shown as a debit (–) and means that merchandise imports have exceeded merchandise exports.

Further Reading

- *Balance of Payments, Australia* (5302.0)
  Presents detailed quarterly data on the balance on goods and services for the last 10 quarters. Historical summaries of the latest 16 years are also included.

- *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0)
  Provides a comprehensive description of the concepts and structure of the Australian balance of payments, including the data sources and methods used to compile the goods and services statistics, as shown in Australian balance of payments publications.

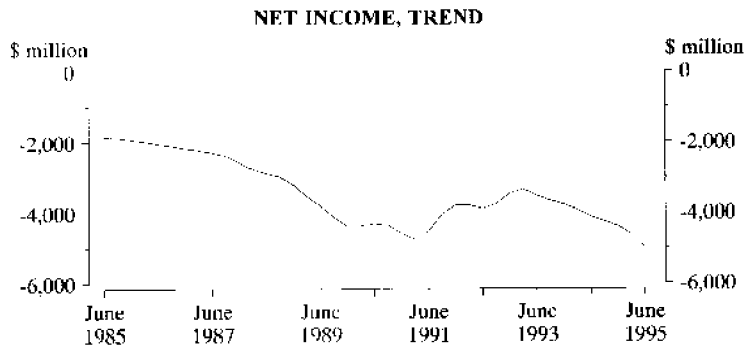
- *A Guide to Balance of Payments Statistics* (5362.0)
  Contains general concepts and practices involved in the Australian Balance of Payments. Provides a basic explanation of data sources, methods and uses of balance of payments statistics.

- *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.7 Net Income

Comment

Australia's net income deficit in trend estimate terms increased significantly up to the early 1990s, reaching –$4,753m in March quarter 1991. From June quarter 1991 the net income deficit decreased substantially and in March quarter 1993 declined to –$3,351m. Since then, the net income deficit has increased, reaching –$5,013m in June quarter 1995.



Source: ABS 5302.0, Quarterly data

NET INCOME
($ million)

Period	*Income credits*	*Income debits*	*Net income*
	ANNUAL		
1989–90	4,695	–21,887	17,192
1990–91	4,013	–22,069	18,056
1991–92	4,396	–19,968	15,572
1992–93	5,924	–19,860	13,936
1993–94	6,015	–21,695	–15,680
1994–95	7,183	25,576	–18,393
	QUARTERLY — TREND		
1993–94–			
December	1,584	5,364	–3,780
March	1,523	5,440	–3,917
June	1,483	5,601	–4,118
1994–95–			
September	1,615	–5,855	–4,240
December	1,792	–6,171	–4,379
March	1,873	–6,493	–4,620
June	1,843	–6,856	–5,013

Source: ABS, Balance of Payments, Australia (5302.0).

Explanatory Notes

The income item of the Balance of Payments covers income earned by Australian residents from non-residents (credits) and income earned by non-residents from Australian residents (debits). In broad terms, income relates to the return to the owner of a resource from the use of that resource by either the owner or another economic entity.

In the balance of payments current account, income is divided into three categories: investment income, other property income, and labour and other income.

Investment income refers to the earnings by owners of financial assets and commonly includes such items as dividends and interest. Earnings received by Australian residents from the ownership of foreign financial assets are shown as credits and the earnings received by non-residents from their ownership of Australian financial assets are shown as debits.

Other property income refers to the earnings by owners of intangible assets (i.e. patents, film rights, trademarks) or what is usually termed royalties. Royalties payable by residents to non-residents are debits and royalties received by residents from non-residents are credits.

Labour income refers to wages and salaries earned by residents from non-resident employers (credits) or wages and salaries earned by non-residents from resident employers (debits). Other income includes items such as extraordinary insurance claims.

The sum of the income debits with the income credits gives net income. Where income debits exceed income credits, a net income deficit occurs and where income credits exceed income debits, a net income surplus occurs. Australia has traditionally shown a net income deficit, mainly due to interest payments to non-residents to service our foreign debt.

Further Reading

- ☐ *Balance of Payments, Australia* (5302.0)
  Provides detailed quarterly balance of payments tables on current and capital transactions for the latest 10 quarters, including seasonally adjusted and trend estimates of the current account. Historical summaries for the latest 16 years are also included.

- ☐ *Balance of Payments, Australia: Concepts, Sources and Methods* (5331.0)
  Provides a comprehensive description of the concepts and structure of the Australian balance of payments, including the data sources and methods used to compile the income statistics as shown in Australian balance of payments publications.

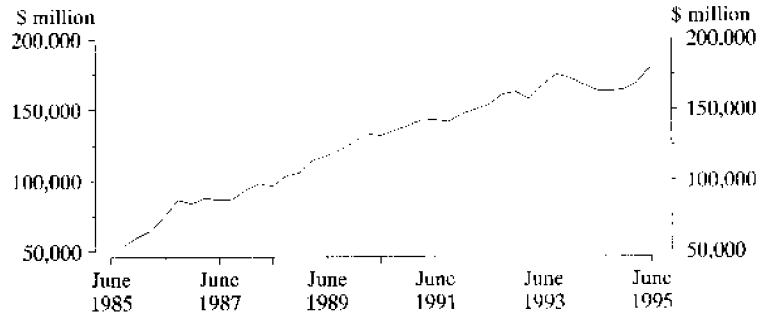
- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Contains detailed annual balance of payments and international investment position statistics, including detailed breakdowns of income credits and debits.

2.2.8 Foreign Debt

Comment

Australia's net foreign debt generally increased from the mid–1980s to the mid–1990s. After reaching a peak of $174,513m at 30 September 1993, a series of falls were recorded and at 30 September 1994 the level had fallen to $162,719m. Subsequent growth saw Australia's level of net foreign debt reach a new high of $180,484m at 30 June 1995.

NET FOREIGN DEBT AT END OF PERIOD



Source: ABS 5306.0, Quarterly data

LEVELS OF FOREIGN DEBT AT END OF PERIOD AND SELECTED RATIOS

Period	*Total gross debt (a) ($m)*	*Reserve assets ($m)*	*Lending abroad ($m)*	*Net foreign debt(a) (b) ($m)*	*Ratio of net foreign debt to GDP(f) (c) (%)*	*Ratio of net interest payable to exports of goods and services (d) (%)*
			ANNUAL			
1989–90	162,770	21,871	9,145	131,754	35.5	20.6
1990–91	179,251	24,047	12,421	142,782	37.8	19.0
1991–92	191,268	22,240	15,463	153,565	39.8	15.6
1992–93	208,420	20,823	20,278	167,320	41.5	12.0
1993–94	205,927	20,661	22,029	163,237	38.3	11.2
1994–95	222,576	20,184	21,908	180,484	39.8	11.2
			QUARTERLY			
1993–94						
December	211,195	20,955	18,250	171,990	41.5	11.1
March	211,738	20,834	23,055	167,849	40.0	11.1
June	205,927	20,661	22,029	163,237	38.3	11.2
1994–95—						
September	205,569	20,308	22,542	162,719	37.5	11.3
December	202,632	18,417	20,198	164,017	37.2	11.4
March	212,777	21,240	22,659	168,878	37.8	11.4
June	222,576	20,184	21,908	180,484	39.8	11.2

(a) As a result of a change in the methodology used to value non-equity securities on foreign capital markets, levels from December quarter 1991 are not strictly comparable with levels from earlier periods. (b) Equals total gross debt less reserve assets and lending abroad. (c) Ratio derived by expressing net foreign liabilities at a particular date as a percentage of GDP for the year preceding this date. (d) Ratio derived by expressing net investment income payable as a percentage of exports of goods and services for the year preceding this date.
Source: ABS, International Investment Position (5306.0)

Explanatory Notes

Foreign debt is the amount borrowed from non-residents by residents of a country. It is distinguished from other components of international investment by the obligation to pay interest and/or repay principal. Components of Australia's international investment position excluded from foreign debt are equity investment, accounts payable or receivable and prepayments made or received.

Gross foreign debt is the total amount borrowed from non-residents. Net foreign debt is equal to gross foreign debt minus official reserve assets and lending by residents of Australia to non-residents.

A country borrows from overseas in order to spend more than it earns. The funds can be used to increase investment or consumption.

The level of debt is often expressed as a percentage of the national accounting measure of domestic production, Gross Domestic Product (GDP). This is done to place the extent of foreign debt in context and to enable valid comparisons over time and between countries. Movements in this ratio indicate the changing significance of foreign debt.

An economy's capacity to pay the costs associated with debt are portrayed by its debt service ratio. The debt service ratio shows the percentage of export earnings being used to meet interest payments on debt. The higher the proportion of export earnings used to service the debt, the lesser the economy's capacity to pay.

The level of foreign debt is important due to its effect on the Balance of Payments. The size of the current account deficit shows the excess of payments we have made to other nations over the payments we have received. Interest payments on debt owing to non-residents add directly to the current account deficit. The capital account shows how much we have had to borrow to finance the excess of payments over receipts.

Further Reading

- *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australia's gross and net foreign debt position by sector.

- *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

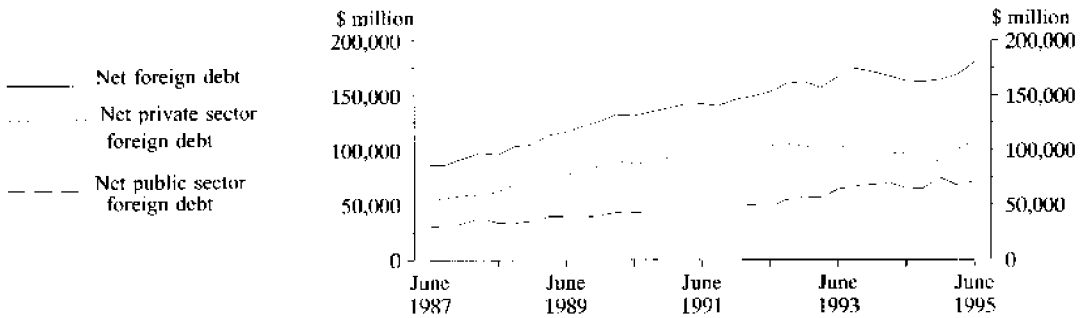
- *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.9 Composition of Net Foreign Debt

Comment

Net foreign debt has increased at an average annual rate of 9.7% from June quarter 1987 to June quarter 1995. Short periods of decline in net foreign debt occurred in 1988, 1991 and from December quarter 1992 to March quarter 1993. A more prolonged decline occurred over the year ending September 1994 as a result of some quarterly declines in both public and private sector debt. Since then, net foreign debt has increased to reach $180,484m at the end of June quarter 1995.

LEVELS OF NET FOREIGN DEBT AT END OF PERIOD



Source: ABS 5306.0, Quarterly data

LEVELS OF NET FOREIGN DEBT AT END OF PERIOD
($ million)

Period	*Public sector debt (a)*	*Private sector debt*	*Net foreign debt (b)*
	ANNUAL		
1989–90	43,401	88,352	131,754
1990–91	45,408	97,375	142,782
1991–92	48,424	105,141	153,565
1992–93	64,721	102,599	167,320
1993–94	65,455	97,783	163,237
1994–95	71,729	108,756	180,484
	QUARTERLY		
1993–94—			
December	68,835	103,155	171,990
March	70,672	97,177	167,849
June	65,455	97,783	163,237
1994–95			
September	65,218	97,501	162,719
December	75,139	88,878	164,017
March	68,194	100,684	168,878
June	71,729	108,756	180,484

(a) Official plus non-official public sector debt. (b) Equals total gross debt less reserve assets and lending abroad.
Source: ABS, International Investment Position, Australia (5306.0).

Explanatory Notes

Australia's net foreign debt consists of net foreign debt incurred by the private sector and by the public sector.

Net public sector debt is the gross debt of Commonwealth, State and Local governments (which is termed official sector debt) and government business enterprises (which is termed non-official public sector debt) less official reserve assets and lending abroad by these resident entities.

The official sector debt makes up a relatively small share of Australia's net foreign debt. The largest share of net foreign debt is owed by the private sector and is the result of foreign borrowing by firms or individuals substantially exceeding their lending abroad.

Statistics on the composition of foreign debt are used to analyse the nature of our foreign debt. For example, having a large private sector debt is considered by many as more desirable than having a large official sector debt, since it is assumed that the private sector is more likely to borrow to finance investment rather than consumption.

The composition of foreign debt may also be examined by industry, country, currency and maturity structure.

Further Reading

- ☐ *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australia's gross and net foreign debt position.

- ☐ *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

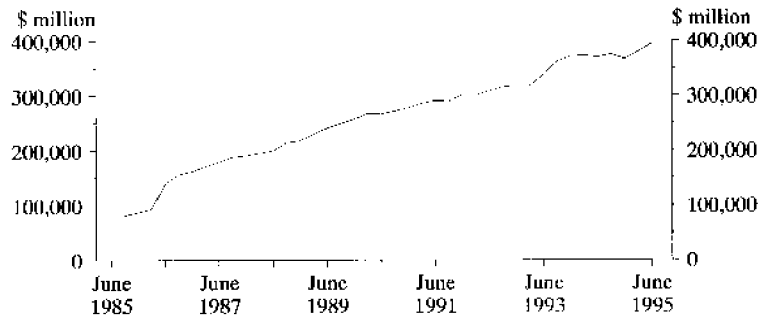
- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.10 Foreign Investment in Australia

Comment

The level of foreign investment in Australia generally increased from the mid–1980s to the mid–1990s with exceptions of slight declines in the early-to-mid 1990s. The level of foreign investment in Australia increased sharply from $318,163m at 31 March 1993 to $363,776m at 30 September 1993 and by 30 June 1995 had reached $395,318m.

LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA
AT END OF PERIOD — TOTAL



Source: ABS 5306.0, Quarterly data

LEVEL OF FOREIGN INVESTMENT IN AUSTRALIA AT END OF PERIOD
($ million)

Period	*Equity*	*Borrowing (a)*	*Other*	*Total*
		ANNUAL		
1989–90	97,355	162,770	6,416	266,541
1990–91	105,370	179,251	6,424	291,045
1991–92	110,866	191,268	6,841	308,975
1992–93	122,091	208,420	6,874	337,386
1993–94	155,057	205,927	9,278	370,262
1994–95	164,210	222,576	8,532	395,318
		QUARTERLY		
1993–94				
December	150,510	211,195	9,389	371,094
March	152,534	211,738	8,751	373,023
June	155,057	205,927	9,278	370,262
1994–95—				
September	161,295	205,569	8,195	375,060
December	156,277	202,632	8,179	367,088
March	158,576	212,777	7,992	379,345
June	164,210	222,576	8,532	395,318

(a) Levels of borrowing from the end of December quarter 1991 are not strictly comparable with levels for earlier periods because of changes in the method used to value non-equity securities issued on foreign capital markets.
Source: ABS, International Investment Position, Australia (5306.0).

Explanatory Notes

Foreign investment in Australia refers to the stock of Australian liabilities owed to non-residents; and capital transactions and other changes which increase or decrease this stock.

Foreign investment can take many forms and involves both public and private sectors of the Australian economy. The type of investment will affect the amount of influence or control the foreign investor has over Australian physical assets.

For example, foreign investment in government securities does not result in foreign control of Australian physical assets, while equity investment in companies may involve the transfer of control.

The concept of direct investment is broadly one of capital invested in an enterprise by an investor having a significant influence, either potentially or actually exercised, over the key policies of the enterprise. Direct investment is defined as any investment between two enterprises (or an individual and an enterprise) in a direct investment relationship.

For foreign investment in Australia, a direct investment relationship is deemed to exist between a resident enterprise and a foreign individual or enterprise having an equity interest in that resident enterprise of at least 10%.

The level and composition of foreign investment in Australia are important in their own right in assessing, for example, changing finance patterns and relationships with other countries. They are also important in terms of their impact on the balance of payments. For example, earned income by non-residents on their investments in Australia are payments we make to other nations and cause a rise in a current account deficit or a decline in a current account surplus.

Further Reading

- ☐ *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australian investment abroad, by institutional sector and type of investment.

- ☐ *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

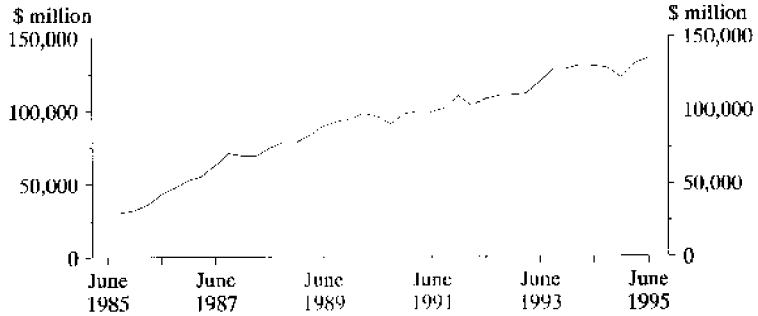
- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.11 Australian Investment Abroad

Comment

The overall level of Australian investment abroad increased from the mid–1980s to the mid–1990s with a series of falls being more than offset by increases in subsequent quarters. The highest sustained levels of growth were recorded in the period from June quarter 1986 to September quarter 1987 while the highest fall (6.3%) occurred in March quarter 1992. In the latest recorded period from June quarter 1994 to June quarter 1995, a series of falls in the level of Australian investment abroad has been followed by growth in March and June quarters of 1995.

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD — TOTAL



Source: ABS 5306.0, Quarterly data

LEVEL OF AUSTRALIAN INVESTMENT ABROAD AT END OF PERIOD
($ million)

Period	*Equity*	*Reserve assets and lending (a)*	*Other*	*Total*
		ANNUAL		
1989–90	56,797	31,016	7,857	95,670
1990–91	54,931	36,468	7,663	99,063
1991 92	63,845	37,703	6,603	108,151
1992 93	70,321	41,101	7,482	118,904
1993 94	78,293	42,690	9,200	130,183
1994 95	84,813	42,092	8,491	135,395
		QUARTERLY		
1993–94				
December	80,933	39,205	8,102	128,241
March	78,929	43,889	7,735	130,553
June	78,293	42,690	9,200	130,183
1994 95—				
September	78,229	42,850	7,670	128,749
December	75,819	38,615	7,995	122,429
March	79,700	43,899	8,053	131,651
June	84,813	42,092	8,491	135,395

(a) Levels of lending from the end of December quarter 1991 are not strictly comparable with levels for earlier periods because of change in the method used to value non-equity securities issued on foreign capital markets.
Source: ABS, International Investment Position, Australia (5306.0)

Explanatory Notes

Australian investment abroad refers to the stock of foreign financial assets (claims on non-residents) owned by Australian residents; and capital transactions and other changes which increase or decrease this stock.

Australians invest in foreign countries for a variety of reasons including: the securing and maintenance of market share, sales promotion, effective marketing, avoidance of tariffs and import restrictions, securing of raw materials and to take advantage of cheaper inputs or higher rates of return on investments or to spread their risk.

Earnings from Australian investment abroad form a component of the current account of the balance of payments. The income earned by Australia's investments abroad is income payable to Australia. A rise in earnings increases a current account surplus or reduces a current account deficit.

Further Reading

- *International Investment Position, Australia* (5306.0)
  Contains quarterly detailed analysis of Australian investment abroad, by institutional sector and type of investment.

- *Foreign Investment, Australia: Summary of Concepts, Sources and Methods* (5355.0)
  Presents a summary description of the concepts underlying foreign investment statistics and of the data sources and methods used to compile the statistics.

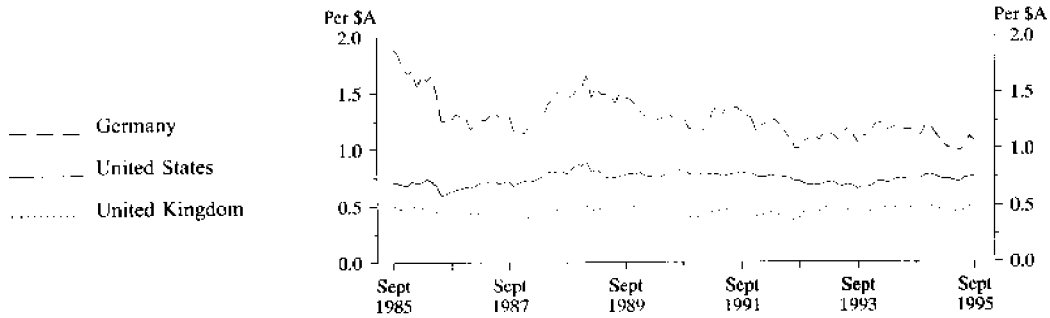
- *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.12 Exchange Rates

Comment

The value of the Australian dollar ($A) generally depreciated against the United States dollar ($US) from September 1985, falling to $0.60 in July 1986. By January 1989, the $A had risen to $0.89 against the $US followed by an overall decline to $0.65 in September 1993. Since then, a slight upturn in the value of the $A against the $US has been recorded, reaching $0.78 in December 1994. At September 1995 it was $0.76.

SELECTED EXCHANGE RATES PER AUSTRALIAN DOLLAR



Source: ABS 5302.0, Monthly data

EXCHANGE RATES: CURRENCY PER AUSTRALIAN DOLLAR (a)

Period	*United States dollar*	*United Kingdom pound*	*German mark*	*Japanese yen*
		ANNUAL		
1989–90	0.79	0.45	1.32	120.41
1990–91	0.77	0.47	1.38	106.19
1991–92	0.75	0.39	1.14	94.05
1992–93	0.67	0.45	1.14	71.54
1993–94	0.73	0.47	1.16	72.20
1994–95	0.71	0.45	0.98	60.08
		MONTHLY		
1994–95				
July	0.74	0.48	1.18	73.86
August	0.74	0.48	1.17	73.82
September	0.74	0.47	1.15	72.88
October	0.74	0.46	1.12	72.25
November	0.77	0.49	1.21	75.93
December	0.78	0.50	1.21	77.56
January	0.76	0.48	1.14	74.75
February	0.74	0.47	1.08	71.75
March	0.73	0.45	1.03	64.92
April	0.73	0.45	1.00	61.04
May	0.71	0.44	0.99	59.45
June	0.71	0.45	0.98	60.08
1995–96				
July	0.74	0.46	1.02	65.31
August	0.75	0.49	1.11	73.55
September	0.76	0.48	1.07	74.22

(a) Rates are for the last trading day of the reference period. *Source: Reserve Bank of Australia Bulletin (RBA).*

Explanatory Notes

The price of one currency against another is known as the exchange rate. For example, at the end of September 1995 one Australian dollar would purchase 0.76 United States dollars, 0.48 United Kingdom pounds and 74.22 Japanese yen. Similarly, 0.76 United States dollars would purchase one Australian dollar. Therefore, the exchange rate can be used as a measure of a currency's value.

Exchange rates vary over time. When the exchange rate for the Australian dollar against another currency rises (appreciates) it will buy more of the foreign currency.

Exchange markets in which currencies are bought and sold facilitate world trade. When selling goods and services abroad Australian residents receive foreign currencies which can be used as payment for imports of goods and services.

The value of the exchange rate affects the price that Australia receives for its exports and pays for its imports. Generally when the exchange rate for a country's currency appreciates the price residents pay for imports declines, while for non-residents our exports become more expensive. Alternatively, a currency depreciation will cause the price of imports into Australia to rise and lower the international price of our exports. These changes can affect the demand for imports and exports and, hence, the balance of payments.

Further Reading

- ☐ *Balance of Payments, Australia* (5301.0)
  Contains monthly average and end of month exchange rates of the major currencies for the latest 15 months.

- ☐ *Balance of Payments, Australia* (5302.0)
  Contains quarterly average and end of quarter exchange rates of the major currencies for the latest 10 quarters.

- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

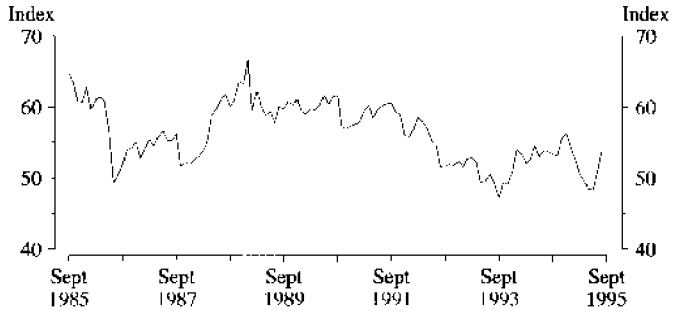
- ☐ *Average Monthly Exchange Rates* (5654.0)
  Available by subscription. Contains averages of daily exchange rates for approximately 35 currencies, including both the buying and selling rates and final day trading values against major currencies.

2.2.13 Trade-weighted Index

Comment

The value of the Australian dollar (SA), as measured against other currencies by the trade-weighted index, experienced a volatile period from the mid–1980s to mid–1990s. The index declined overall from 64.8 in September 1985 to a low of 49.3 in July 1986 recovering to 66.7 in January 1989. Since then, it declined reaching its lowest level of 47.3 at the end of September 1993. It has since strengthened reaching 53.8 at the end of September 1995.

TRADE WEIGHTED INDEX (MAY 1970 = 100.0)



Source: ABS 5302.0, Monthly data

TRADE WEIGHTED INDEX AND UNITED STATES DOLLAR EXCHANGE RATE AT END OF PERIOD (a)

Period	*Trade weighted index (b)*	*United States dollar (per $A)*
	ANNUAL	
1989–90	61.60	0.79
1990–91	59.70	0.77
1991–92	55.20	0.75
1992–93	49.55	0.67
1993–94	53.05	0.73
1994–95	48.42	0.71
	MONTHLY	
1994–95—		
July	53.89	0.74
August	53.86	0.74
September	53.38	0.74
October	53.15	0.74
November	55.50	0.77
December	56.24	0.78
January	54.48	0.76
February	52.89	0.74
March	50.65	0.73
April	49.61	0.73
May	48.52	0.71
June	48.42	0.71
1995–96		
July	50.96	0.74
August	53.95	0.75
September	53.80	0.76

(a) Rates are for the last trading day of the reference period. (b) May 1970 = 100.0.
Sources: ABS, Balance of Payments, Australia (5301.0) and Reserve Bank of Australia Bulletin (RBA).

Explanatory Notes

The Australian exchange rate is often quoted in terms of its exchange with the United States dollar ($US).

However, to get a more comprehensive indication of Australia's exchange rate a trade-weighted index (TWI) is used. The TWI measures changes in our currency relative to the currencies of our main trading partners. Taken into account is the relative importance of trade occurring between each country and Australia. Over time, international trade patterns tend to alter, making it necessary to modify the weights to reflect the new trade patterns. The last update by the Reserve Bank of Australia (RBA) occurred in 1994.

The RBA's trade-weighted index includes 24 countries that account for at least 90% of Australia's two-way trade.

The TWI is an absolute number and does not express the price of any one currency in another. Calculation of the TWI is based on the exchange rates for the $A against the chosen currencies at 4 p.m. for each trading day.

Further Reading

- ☐ *Balance of Payments, Australia* (5301.0)
  Contains monthly average and end of month exchange rates of the major currencies for the latest 15 months.

- ☐ *Balance of Payments, Australia* (5302.0)
  Contains the quarterly average and end of quarter trade-weighted index for the latest 10 quarters.

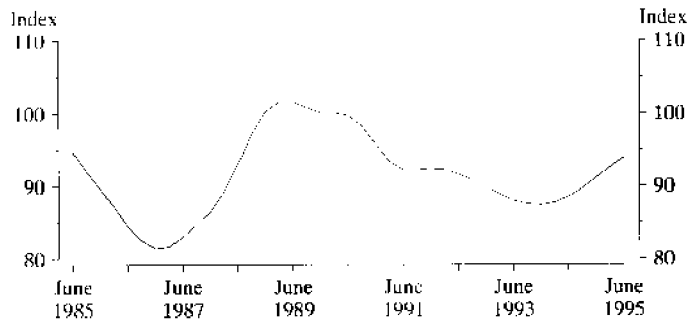
- ☐ *Balance of Payments and International Investment Position, Australia* (5363.0)
  Provides detailed tables on balance of payments current and capital account and international investment position (including foreign debt) for the latest 6 years. It also includes longer term historical series, economic ratios, international comparisons, analytical comments and graphs of principal aggregates.

2.2.14 Terms of Trade and Indexes of Competitiveness

Comment

Australia's terms of trade for goods and services, in trend estimate terms, fell sharply from September quarter 1984 to the lowest level recorded in December quarter 1986 before recovering to peak in March quarter 1989. Since then, Australia's terms of trade declined in most quarters before commencing an upward trend in late 1993.

TERMS OF TRADE FOR GOODS AND SERVICES
TREND (1989–90 = 100.0)



Source: ABS 5206.0, Quarterly data

TERMS OF TRADE AND INDEXES OF COMPETITIVENESS

Period	*Terms of trade (a) (b)*	*Index of relative domestic prices (c)*	*Index of adjusted CPI (a) (d)*	*Index of adjusted GDP deflator (a) (d)*	*Index of adjusted unit labour costs (a) (d)*
		ANNUAL			
1989 90	100.0	109.0	100.0	100.0	100.0
1990 91	94.8	112.7	97.0	95.9	98.3
1991 92	92.3	118.1	93.7	92.5	94.8
1992 93	89.4	111.9	82.0	80.9	82.4
1993 94	87.7	115.6	78.4	77.0	77.6
1994 95	91.7	124.0	80.4	78.0	78.7
		QUARTERLY — ORIGINAL UNLESS FOOTNOTED			
1993–94					
December	87.4	111.9	76.1	74.7	75.3
March	87.7	119.7	80.7	79.3	79.4
June	88.5	121.5	81.2	79.7	80.7
1994–95—					
September	89.6	123.7	80.9	79.0	78.6
December	91.1	126.3	82.9	80.6	81.0
March	92.5	125.3	81.8	79.2	80.4
June	93.8	120.6	75.8	73.1	74.9

(a) Base year 1989 90 = 100.0. (b) Trend for quarterly data. (c) Base year 1980 = 100.0. (d) Adjusted for exchange rate changes. See Explanatory notes for further details.
Sources: ABS, Australian National Accounts: National Income, Expenditure and Product (5206.0) and Australian Economic Indicators (1350.0).

Explanatory Notes

A country's terms of trade shows a country's export prices relative to its import prices. It is expressed as an index, which is calculated by dividing an index of prices received for exports by an index of prices paid for imports.

A rise in the index implies an improvement in a country's terms of trade, so it becomes possible to purchase more imports with the same amount of exports. Improvement in a country's terms of trade occurs when export prices rise, when import prices fall or when export prices rise at a faster rate than import prices, or when export prices fall at a slower rate than import prices.

A fall in the index occurs when a country's terms of trade deteriorates. It is necessary to export more to purchase the same amount of imports. A deterioration occurs when import prices rise, when export prices fall or when import prices rise at a faster rate than export prices, or when import prices fall at a slower rate than export prices.

The index of relative domestic prices is the relative domestic price of non-traded goods compared with imported goods. The relative domestic price index can be used to indicate possible resource flows between the domestic traded and non-traded goods sectors in a small economy that engages in international trade. A decrease in the price of non-traded goods relative to imported goods in the domestic economy (a fall in the relative domestic price) encourages a flow of resources into the traded goods sector, thereby encouraging additional exports and import replacement.

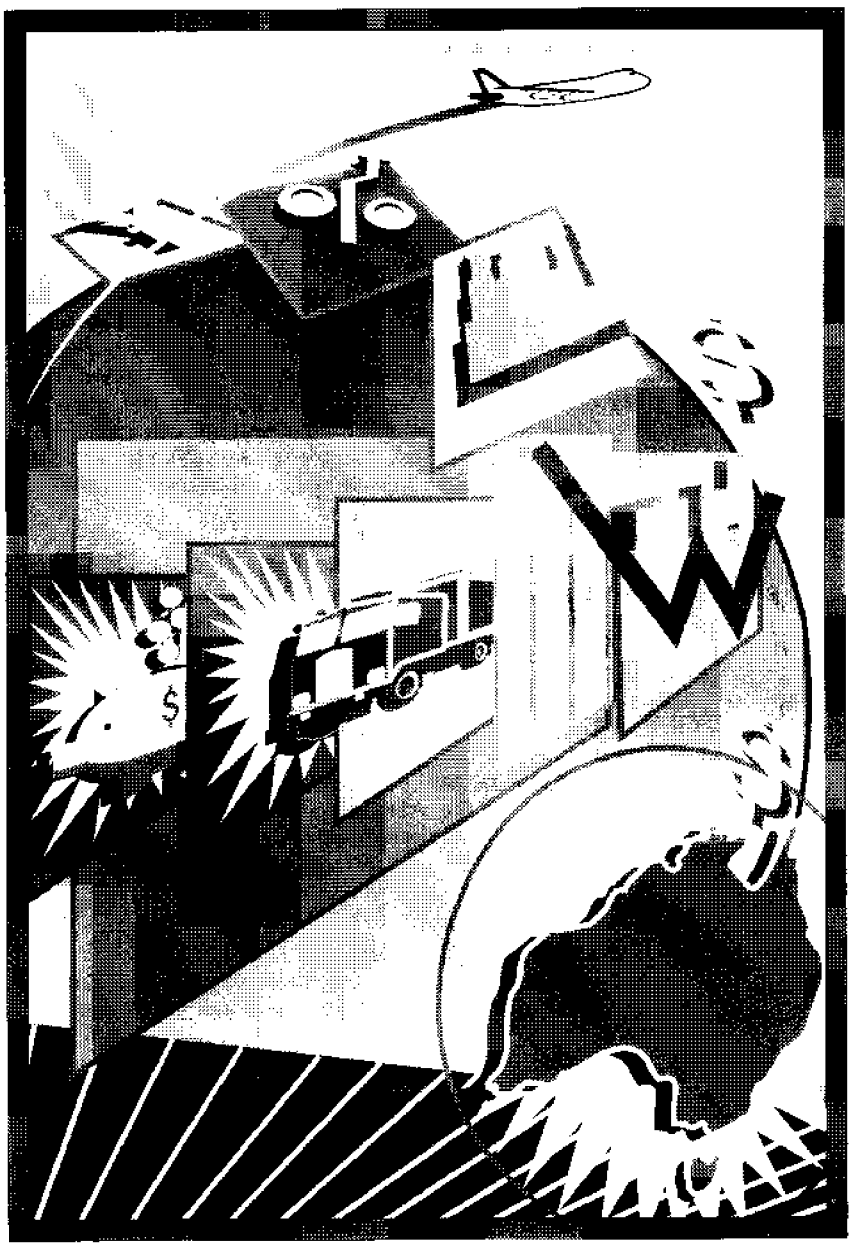
The adjusted CPI index is the ratio of the Australian consumer price index to the weighted geometric average of the exchange rate adjusted consumer price indexes of Australia's four major trading partners.

The adjusted GDP deflator index is the ratio of the GDP deflator for Australia to the weighted geometric average of the exchange rate adjusted GDP deflators of Australia's four major trading partners.

The adjusted unit labour cost index is the ratio of unit labour costs in the non-farm sector of the Australian economy to the weighted geometric average of the exchange rate adjusted unit labour cost indexes estimated for the business sectors of Australia's four major trading partners.

Further Reading

- *Australian Economic Indicators* (1350.0)
  Provides time series for the latest 9 years and data for the last 9 quarters covering terms of trade and indexes of competitiveness.
- *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Provides estimates of the terms of trade.
- *Balance of Payments, Australia* (5302.0)
  Provides estimates of the price indexes of exports and imports and also a measure of terms of trade for the latest 10 quarters.



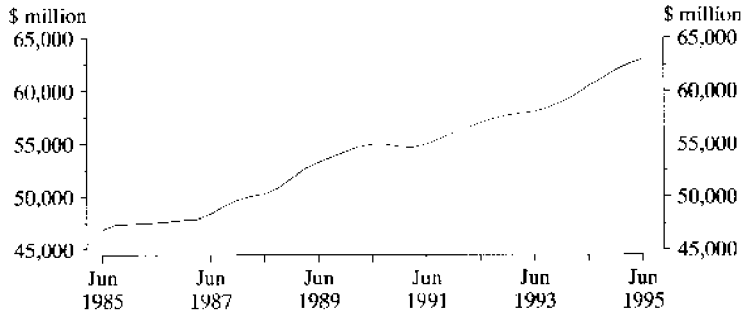
Section 2.3
Domestic Consumption and Investment

2.3.1 Private Final Consumption Expenditure

Comment

Private final consumption expenditure in trend estimate constant price terms has shown steady growth from the mid–1980s. From June quarter 1985 to June quarter 1995, private final consumption expenditure grew at an average annual rate of 3.0%, experiencing a decrease only from June quarter 1990 to March quarter 1991.

TOTAL PRIVATE FINAL CONSUMPTION EXPENDITURE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5206.0, Quarterly data

SELECTED COMPONENTS OF PRIVATE FINAL CONSUMPTION EXPENDITURE AT AVERAGE 1989–90 PRICES ($ million)

Period	*Food*	*Clothing, fabrics and footwear*	*Health*	*Dwelling rent*	*Total*
		ANNUAL			
1989–90	31,623	12,914	14,838	39,341	217,428
1990–91	32,348	12,548	15,283	40,519	218,890
1991–92	33,287	13,045	16,170	41,556	224,704
1992–93	34,352	13,036	16,932	42,866	230,883
1993–94	35,595	13,399	17,631	44,231	236,788
1994–95	37,978	13,922	18,470	45,695	248,771
		QUARTERLY — TREND			
1993–94—					
December	8,838	3,341	4,375	11,007	58,962
March	8,972	3,371	4,425	11,104	59,635
June	9,139	3,406	4,486	11,196	60,424
1994–95—					
September	9,287	3,440	4,550	11,282	61,190
December	9,419	3,470	4,603	11,374	61,939
March	9,538	3,488	4,637	11,473	62,570
June	9,617	3,490	4,664	11,576	63,035

Source: ABS, Australian National Accounts: National Income and Expenditure (5206.0).

Explanatory Notes

Private final consumption expenditure measures current expenditure by households and producers of private non-profit services to households, such as charities, clubs, trade unions and private schools. The outlays covered include expenditure on consumer durables such as cars, furniture and long lasting household appliances; consumer semi-durables such as clothing and other appliances; single use goods such as food; and services of all kinds, for example, hairdressing and public transport.

Private final consumption expenditure makes up over half of GDP(E) and is the largest component of aggregate demand. Consequently, changes in private final consumption expenditure from one period to another have a significant impact on overall changes in GDP(E). A fall in demand for consumer goods and services will be reflected in falling private final consumption expenditure. On the other hand, a rise in demand for consumer goods and services will be reflected in increasing private final consumption expenditure.

The level of private final consumption expenditure is dependent on a number of factors including: present and anticipated future levels of income, expenditure and saving habits, relative price levels and the rate of inflation.

Economic policy makers may attempt to influence the level of private final consumption expenditure to dampen or stimulate the economy by altering the level of household disposable income through taxation or wages policy.

Further Reading

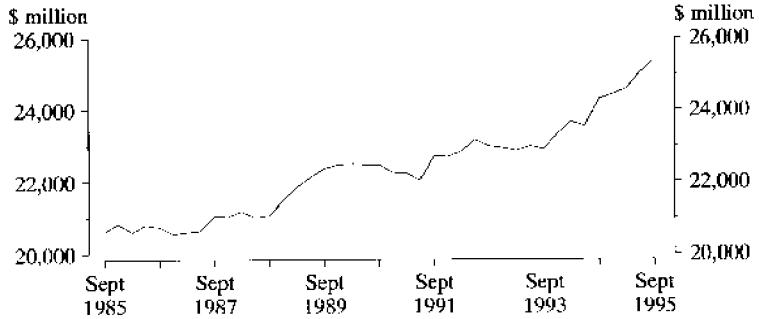
- *Australian National Accounts: National Income, Expenditure and Product* (5204.0)
  Contains annual data for the last 12 years for private final consumption expenditure.
- *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data for private final consumption expenditure.
- *Australian National Accounts, Concepts, Sources and Methods* (5216.0)
  Contains a detailed explanation of the system of Australian national accounts outlining major concepts and definitions.

2.3.2 Retail Turnover

Comment

Between 1985 and 1995 turnover of retail establishments in seasonally adjusted constant price terms has recorded variable movement with an overall upward trend, averaging an annual growth rate of 2.1% for the 10 years ending September 1995. A significant decrease occurred when turnover fell 2.0% from $22,479.0m in June quarter 1990 to $22,038.4m in June quarter 1991. Since then, steady growth in turnover of retail establishments has been recorded.

TURNOVER OF RETAIL ESTABLISHMENTS AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 8501.0, Quarterly data

TURNOVER OF RETAIL ESTABLISHMENTS AT AVERAGE 1989–90 PRICES
($ million)

Period	*Total*
ANNUAL	
1989–90	89,886.4
1990–91	88,911.3
1991–92	91,509.3
1992–93	91,756.7
1993–94	93,527.6
1994–95	98,348.3
QUARTERLY — SEASONALLY ADJUSTED	
1993–94—	
March	23,670.5
June	23,537.2
1994–95	
September	24,295.6
December	24,420.9
March	24,594.0
June	25,022.4
1995 96—	
September	25,362.2

Source: ABS, Retail Trade, Australia (8501.0).

Explanatory Notes

This series presents estimates of turnover for retail (i.e. grocers, clothing stores, department stores, etc.) and selected service businesses (such as cafes and restaurants, hotels and licensed clubs, etc.) for each State and Territory. Turnover includes retail sales, wholesale sales, takings from repairs, meals and hiring of goods (except for rent, leasing and hiring of land and buildings) and commissions from agency activity (e.g. commissions received from collecting dry cleaning) and net takings from gaming machines.

The data are provided in original and seasonally adjusted terms. More information is provided on seasonal adjustment in Chapter 4 on page 145.

To enable the analysis of retail activity in 'real terms', estimates of retail turnover at constant (average 1989-90) prices are compiled each quarter. This removes the effects of price increases over time.

The retail trade series dates back to 1961 and is one of the main economic indicator series of the ABS. The series can be used in conjunction with other economic indicators to assess Australian economic performance.

Further Reading

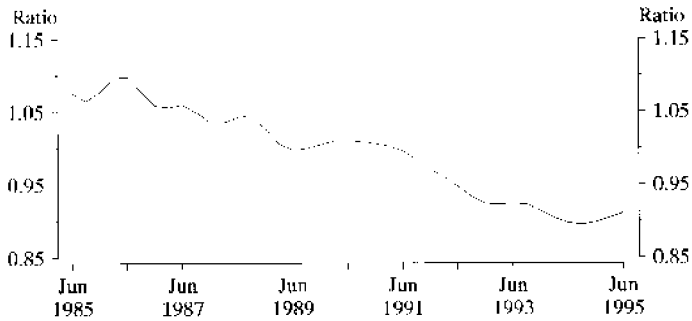
- *Australian Economic Indicators* (1350.0)
  See the feature article in the August 1991 publication for a time series decomposition of retail trade.
- *Retail Trade, Australia* (8501.0)
  Contains monthly estimates of turnover for retail businesses for Australia, each State and Territory and by industry.
- *Retail Industry: Commodity Sales, Australia* (8624.0)
  Contains details of retail sales by commodity item by industry by State.
- *Retail Industry, State and Territory Summary* (8625.0)
  Contains performance data on income and expenditure, profit and other performance measures by retail sector.

2.3.3 Private Non-farm Stocks to Sales Ratio

Comment

The trend private non-farm stocks to sales ratio declined steadily to September quarter 1994. This decline was more pronounced between June quarter 1991 and September quarter 1994. One of the possible factors behind the general decrease in the non-farm stocks to sales ratio is the adoption by businesses of more cost-effective stock management systems.

PRIVATE NON-FARM STOCKS TO SALES RATIO, TREND



Source: ABS 5206.0, Quarterly data

PRIVATE NON-FARM STOCKS TO SALES RATIO
($ million)

Period	*Private non-farm stock levels*	*Sales (derived)*	*Private non-farm stocks to sales ratio (%)*
	ANNUAL		
1989–90	58,939	234,073	1.009
1990–91	59,254	235,952	1.007
1991–92	57,549	238,911	0.966
1992–93	58,506	252,882	0.928
1993–94	60,482	266,587	0.910
1994–95	65,245	289,088	0.905
	QUARTERLY TREND		
1993–94			
December	60,192	65,911	0.913
March	60,655	67,123	0.904
June	61,487	68,543	0.897
1994–95—			
September	62,699	70,109	0.894
December	64,306	71,603	0.898
March	66,026	73,011	0.904
June	67,771	74,361	0.911

Sources: ABS, Australian National Accounts: National Income and Expenditure (5206.0) and Stocks, Manufacturers' Sales and Expected Sales, Australia (5629.0).

Explanatory Notes

The private non-farm stocks to sales ratio gives the indication of the value of stocks (or inventories) held by private sector businesses other than those in farming, compared with sales in a given period of time.

Private non-farm stocks are defined to include goods for sale (either of own production or purchased for resale), work in progress, raw materials and stores of all non-farm industries. All private non-farm industries are covered, with the major stock-holding industries being manufacturing, wholesale trade, retail trade and mining. Sales are defined as private final consumption expenditure on goods plus private fixed capital expenditure on dwellings, non-dwelling construction and equipment plus public gross fixed capital expenditure plus exports of non-rural goods.

Private non-farm stock levels may fluctuate significantly with changes in economic activity. Such periodic fluctuations in the level of non-farm stocks are often referred to as the 'stocks cycle'. It should be noted that there has been a general decline in the private non-farm stocks to sales ratio since the early 1980s as businesses have adopted more cost-effective stock management systems.

The private non-farm stocks to sales ratio is an important indicator of future business intentions. An increase in the ratio may indicate that businesses have decided to build up stocks in anticipation of increased sales. On the other hand, the ratio may fall as businesses decide to run down their stocks if sales are expected to weaken.

Of course, at times there will also be some unplanned stock build-ups or run-downs. If sales are higher than expected, then stock levels will be less than planned. Conversely, if sales are lower than anticipated, then there will be an increase in stock holdings in the short term. In this way, stocks act as the buffer between changes in demand and the supply of goods available to meet that demand.

Further Reading

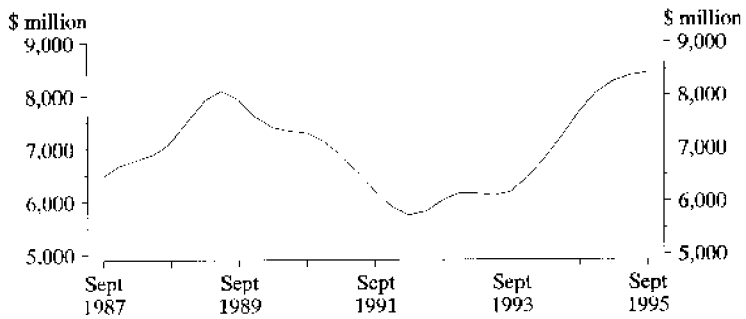
- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains stocks to sales ratio in 1989–90 seasonally adjusted and trend terms.

2.3.4 Private New Capital Expenditure

Comment

Business confidence grew strongly during the late 1980s with actual new private capital expenditure in trend estimate constant price terms, increasing to peak at $8,088m in June quarter 1989. Following this peak, private new capital expenditure decreased to $5,746m in March quarter 1992. The series has recorded a significant upward trend from September 1993, reaching $8,429m in September quarter 1995 but is showing signs of slowing.

ACTUAL PRIVATE NEW CAPITAL EXPENDITURE AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 5625.0, Quarterly data

ACTUAL PRIVATE NEW CAPITAL EXPENDITURE AT AVERAGE 1989–90 PRICES ($ million)

Period	*Buildings and structures*	*Equipment, plant and machinery*	*Total*
	ANNUAL		
1989–90	11,454	18,611	30,065
1990–91	10,670	17,211	27,811
1991–92	8,120	15,547	23,667
1992–93	7,899	16,568	24,467
1993–94	8,218	18,595	26,813
1994–95	8,632	23,825	32,457
	QUARTERLY TREND		
1993–94—			
March	2,088	4,721	6,809
June	2,020	5,213	7,233
1994–95			
September	2,009	5,666	7,676
December	2,100	5,944	8,044
March	2,237	6,016	8,253
June	2,375	6,007	8,382
1995–96			
September	2,489	5,940	8,429

Source: ABS, Private New Capital Expenditure and Expected Expenditure (5625.0).

Explanatory Notes

Private new capital expenditure is also referred to as business fixed investment. It is defined as all spending by Australian business on new fixed tangible assets. The quarterly ABS survey produces data by industry and by State.

Investment spending is classified into two types of assets: buildings and structures; and equipment, plant and machinery. The level of investment in these assets has a major impact on the future productive capacity of the economy.

In the Australian national accounts, the measure of fixed investment used in the expenditure based method of determining gross domestic product is referred to as gross fixed capital expenditure. This is equal to new capital expenditure plus acquisitions of second-hand assets, minus disposals of second-hand assets.

As well as details of actual expenditure, the ABS publishes data from businesses on expected capital expenditure for periods up to 18 months in advance.

Investment is largely a reflection of the level of business confidence about future demand. Capital expenditure may be for assets which will increase production, increase efficiency or replace old equipment.

Businesses need to take into account many factors when planning their investment. Data analysts therefore see this series as a very useful summary indicator.

Further Reading

- ☐ *Private New Capital Expenditure and Expected Expenditure, Australia* (5625.0)
  Contains estimates of actual and new capital expenditure by type of asset and selected industry.

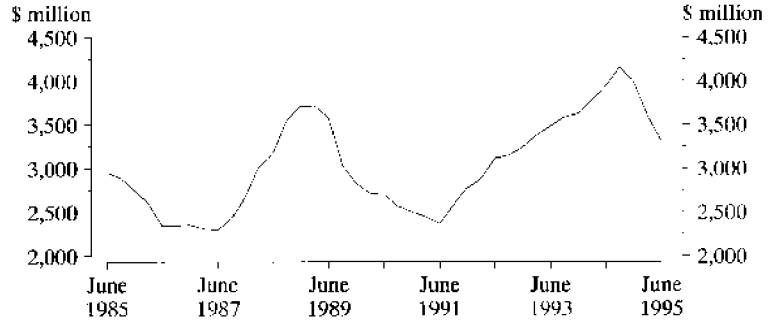
- ☐ *State Estimates of Private New Capital Expenditure* (5646.0)
  Contains a break-up by State of the Australian estimates contained in the above publication (5625.0).

2.3.5 Residential Building Activity

Comment

In seasonally adjusted constant price terms, the value of new residential building commencements increased to peak in March quarter 1989. After a rapid decline from March 1989 to June 1991 quarters, the value of new residential building commencements increased to reach its highest level recorded of $4,155m in September quarter 1994. Since then, the series has recorded a sharp decline, falling to $3,308m in June 1995.

VALUE OF NEW RESIDENTIAL BUILDING COMMENCEMENTS AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 8731.0, Quarterly data

RESIDENTIAL BUILDING APPROVALS AND COMMENCEMENTS, NUMBER AND VALUE AT AVERAGE 1989–90 PRICES

Period	*Number of new dwelling unit approvals (a)*	*Value of approvals ($m)*	*Number of new dwelling unit commencements*	*Value of commencement ($m)*
		ANNUAL		
1989–90	140,016	11,167	137,702	11,289
1990–91	126,046	10,000	121,346	9,901
1991–92	150,201	11,792	140,247	11,318
1992–93	170,557	13,871	161,605	13,212
1993–94	184,705	15,174	177,923	14,913
1994–95	167,244	14,726	166,307	15,098
		QUARTERLY — SEASONALLY ADJUSTED UNLESS FOOTNOTED		
1993–94—				
December	44,549	3,634	43,147	3,626
March	43,170	3,799	44,887	3,769
June	49,975	4,045	46,270	3,947
1994–95				
September	51,471	4,363	46,875	4,155
December	43,503	3,872	44,469	3,988
March	36,188	3,338	38,829	3,611
June	36,082	3,145	35,582	3,308

(a) Seasonally adjusted data not available. Original data provided.
Source: Building Approvals, Australia (8731.0).

Explanatory Notes

A residential building is defined as a building which is predominantly used for long-term residential purposes, and can contain one dwelling unit (i.e. house) or more than one dwelling unit (i.e. flats).

Residential building construction depends on the demand that exists for new places of residence. When the population is expanding rapidly the level of residential construction needs to be increased in order to meet the demand for new homes.

The willingness of individuals and investors to undertake residential building construction is affected by the interest rate and the economic climate. During times of economic expansion, individuals and investors are more willing to invest in residential construction than during periods of economic decline.

When construction is being financed by borrowed funds the interest rate affects the cost of investing. When interest rates are high, investors and developers need to determine whether the return on their investment will make it viable to proceed with construction. Measures of the return on their investment are house prices (for those who sell) and the level of rents (for those who rent dwellings). Other factors which affect investment are the cost of land, labour and building materials. All of these are affected by the prevailing economic climate.

Residential construction statistics are used by government and private organisations. One of these organisations is the Indicative Planning Council for the housing industry which uses building statistics to assist in forecasting the demand and supply of new housing. The government uses the Council's forecasts as one input to determine future policy regarding residential construction in the overall economic context.

The housing sector is seen to be a leading indicator of the general state of the economy. Because housing is seen as a basic requirement for all Australians, there has been a continuing demand for more houses as the population has grown. As economic conditions become more favourable, the housing sector is one of the first areas to strengthen as it meets the pent-up demand which generally occurs.

Further Reading

- ☐ *Building Approvals, Australia* (8731.0)
  Contains monthly information on the number of dwelling units and the value of residential building approved for the private and public sectors.

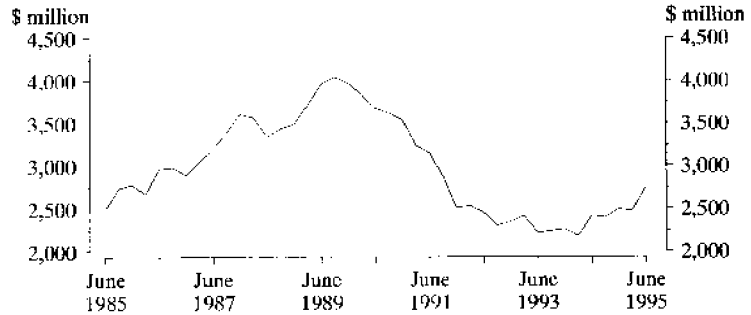
- ☐ *Building and Construction Activity, Australia* (8754.0)
  Provides estimates of activity for building and construction. Separate data on work commenced, work done and work yet to be done are provided for building activity (residential and non-residential) and engineering construction activity.

2.3.6 Non-residential Building Activity

Comment

The value of non-residential building activity in seasonally adjusted constant price terms recorded variable movement with an underlying upward trend which peaked at $4,040m in September quarter 1989. Non-residential building activity declined rapidly to $2,306m in September quarter 1992, followed by a slower rate of decline to $2,180m in March quarter 1994. Since then, the series has shown growth to reach $2,766m in June quarter 1995.

VALUE OF NON-RESIDENTIAL BUILDING ACTIVITY AT AVERAGE 1989–90 PRICES, SEASONALLY ADJUSTED



Source: ABS 1350.0, Quarterly data

NON-RESIDENTIAL BUILDING ACTIVITY AT AVERAGE 1989–90 PRICES
($ million)

Period	*Private sector*	*Total*
	ANNUAL	
1989–90	12,000	15,548
1990–91	9,689	13,588
1991–92	6,945	10,386
1992–93	6,159	9,285
1993–94	5,985	9,112
1994–95	7,063	10,139
	QUARTERLY - SEASONALLY ADJUSTED	
1993–94—		
December	1,455	2,265
March	1,438	2,180
June	1,610	2,411
1994–95—		
September	1,665	2,400
December	1,704	2,495
March	1,762	2,475
June	1,935	2,766

Source: ABS, Building and Construction Activity, Australia (8754.0) and Australian Economic Indicators (1350.0).

Explanatory Notes

Non-residential buildings are defined as buildings other than residential buildings and include hotels, shops, factories, offices, etc. The level of non-residential building construction is an indicator of the level of investment and activity occurring in the economy. Non-residential buildings are used by businesses (both private and public) who participate in economic activity and services (hospitals, schools, etc.) which are essential for the community.

Construction of non-residential buildings varies with the demand for particular types of buildings and with the level of economic activity. While overall economic conditions generally determine whether the return on an investment will be greater than the costs of investment, the demand for particular types of buildings varies considerably.

Thus the demand for construction of new hotels depends on the perceived level of future tourism activity, the demand for factories on the state of the manufacturing industry and the demand for shops and offices on the current (over or under) supply of these buildings and some feel for future demand. The demand for construction of community and public services (hospitals, schools, etc.) tends to be more constant and more affected by government budget considerations.

The level of non-residential building is used by public and private sector bodies as a measure of economic activity and an indicator of business confidence and growth.

Further Reading

- *Building Approvals, Australia* (8731.0)
  Contains monthly information on the number and value of non-residential building by class of building approved.

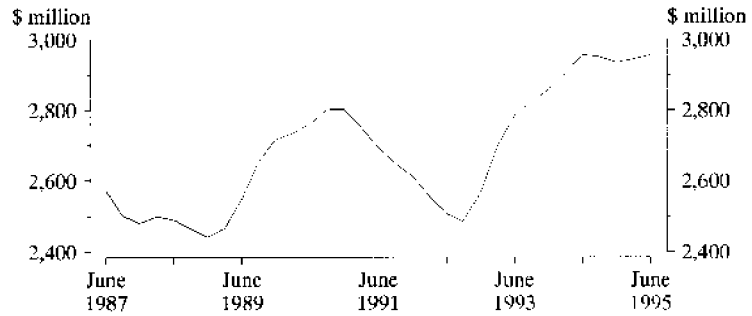
- *Building and Construction Activity, Australia* (8754.0).
  Provides estimates of activity within the building and construction sector. Separate data on work commenced, work done and work yet to be done are provided for building activity (residential and non-residential) and engineering construction activity.

2.3.7 Engineering Construction

Comment

The value of engineering construction activity in trend estimate terms increased from $2,440m in December quarter 1988 to $2,803m in December quarter 1990. Activity then decreased, falling to $2,486m in September quarter 1992. Subsequent rapid growth saw the value of engineering construction activity rise to $2,956m in June quarter 1994, the highest estimate ever recorded since the series commenced. The series has remained fairly constant since June quarter 1994.

ENGINEERING CONSTRUCTION ACTIVITY
VALUE OF WORK DONE AT AVERAGE 1989–90 PRICES
TREND



Source: ABS 1350.0, Quarterly data

ENGINEERING CONSTRUCTION ACTIVITY, VALUE OF WORK DONE AT AVERAGE 1989–90 PRICES ($ million)

Period	*Total private sector*	*Total*
	ANNUAL	
1989–90	3,107	10,926
1990–91	2,991	11,128
1991–92	2,936	10,341
1992–93	2,762	10,633
1993–94	3,450	11,516
1994–95	3,550	11,802
	QUARTERLY — TREND	
1993–94		
December	854	2,857
March	895	2,904
June	907	2,956
1994–95—		
September	896	2,950
December	888	2,934
March	892	2,944
June	895	2,955

Source: ABS, Australian Economic Indicators (1350.0).

Explanatory Notes

Engineering construction is defined as infrastructure construction. It includes construction other than buildings, e.g. roads, bridges, railways, telecommunications, water and sewerage, electricity generation and distribution facilities.

The level of engineering construction gives an indication of the economy's capability to grow and expand in the future. A modern economy needs a highly efficient infrastructure to ensure that the economy can operate to its capacity and that the needs of the population are adequately serviced.

Before September 1986, data on engineering construction were limited to projects valued at $100,000 or more undertaken by private contractors only. From September 1986, the collection was expanded to include all engineering construction work undertaken by both the private and public sectors, irrespective of the value of the individual projects.

A significant proportion of engineering construction is funded by government although much of the work is contracted out to private sector firms.

Further Reading

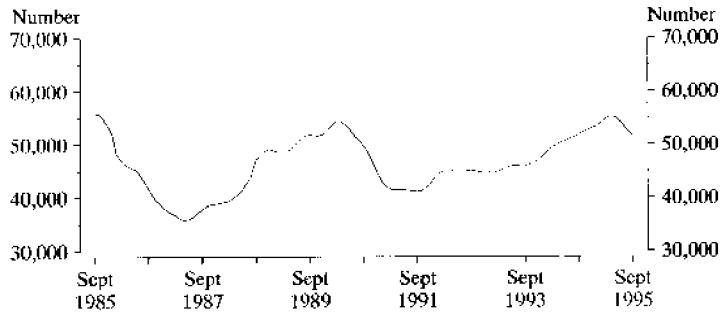
- *Building and Construction Activity, Australia* (8754.0)
  Provides estimates of activity within the building and construction sector. Separate data on work commenced, work done and work yet to be done are provided for building activity (residential and non-residential) and engineering construction activity.

2.3.8 New Motor Vehicle Registrations

Comment

In trend estimate terms, new motor vehicle registrations fell from 55,832 in September 1985 to a low of 35,861 in May 1987. After this there was a general increase to reach a peak of 54,305 in April 1990. New motor vehicle registrations then mirrored the drop in the economy in the early 1990s, before rising at the end of 1991 and levelling out from June 1992 to February 1993. Following this, there was a steady increase to 55,095 in April 1995 before falling to 51,538 in September 1995.

NEW MOTOR VEHICLE REGISTRATIONS, TREND



Source: ABS 9301.0, Monthly data

NEW MOTOR VEHICLE REGISTRATIONS

Period	*Passenger vehicles*	*Other vehicles (a)*	*Total vehicles (a)*
	ANNUAL		
1989–90	492,235	135,527	627,762
1990–91	430,874	111,580	542,454
1991–92	437,075	84,106	521,181
1992–93	449,843	91,665	541,508
1993–94	475,981	98,288	574,269
1994–95	528,501	110,408	638,909
	MONTHLY — TREND		
1994–95—			
July	41,908	9,088	50,996
August	42,385	8,968	51,354
September	42,937	8,898	51,835
October	43,403	8,891	52,294
November	43,750	8,938	52,688
December	44,020	8,995	53,015
January	44,347	9,080	53,427
February	44,803	9,204	54,007
March	45,295	9,356	54,651
April	45,587	9,508	55,095
May	45,471	9,557	55,029
June	44,931	9,436	54,368
1995 96—			
July	44,247	9,155	53,402
August	43,563	8,810	52,373
September	43,053	8,485	51,538

(a) Excluding motor cycles, tractors, plant and equipment, caravans and trailers.
Source: ABS. New Motor Vehicle Registrations, Australia (9301.0).

Explanatory Notes

When a new motor vehicle is purchased and intended for use on a public road, it is usually registered with the relevant motor vehicle registration authority. Some vehicles are not required to be registered. e.g. those solely used on a farm or mine. Statistics on registrations give an indication of the number of new motor vehicle sales.

A significant part of consumer spending is on buying new motor vehicles. Since consumer spending is an early indicator of trends in the economy, new motor vehicle registrations are an early indicator of the level of economic activity.

Both Commonwealth and State Government Treasury offices and other policy departments use registration statistics for economic planning. The statistics are also used by motor vehicle manufacturers and distributors for market research and by financial institutions in setting lending policies.

Further Reading

- ☐ *Registrations of New Motor Vehicles, Australia, Preliminary* (9301.0)
  Contains monthly registrations in each State and Territory of new passenger vehicles and other vehicles.

- ☐ *Motor Vehicles in Australia* (9311.0)
  An annual compendium source book that brings together and analyses a range of motor vehicle related data. Motor vehicle statistics are presented under several headings: motor vehicle census counts, annual new motor vehicle registration data, information relating to the physical attributes of vehicles, demographic data, financial aspects of vehicle ownership, and vehicle manufacturing, retailing and trade data.

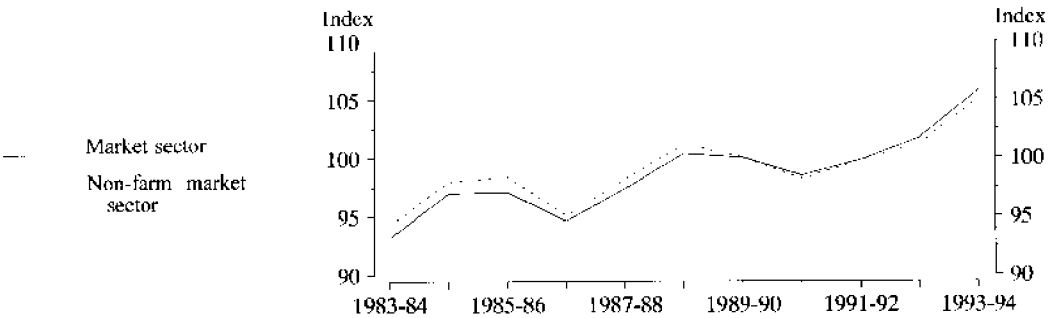
Section 2.4
Production

2.4.1 Productivity

Comment

Productivity, as measured by the multifactor productivity indexes, experienced an overall increase from 1983–84 to 1993–94 for the market sector (93.2 to 105.8) and non-farm market sector (94.3 to 105.1). Declines for both these indexes were experienced, however, in 1986–87 and 1989–90 to 1990–91. The market and non-farm market sectors recorded very similar movements, although the index for the non-farm market index either equalled or fell below the total market sector index from 1989–90.

MULTIFACTOR PRODUCTIVITY INDEXES, MARKET SECTOR AND NON-FARM MARKET SECTOR
(1989–90 = 100.0)



Source: ABS 5234.0, Annual data

PRODUCTIVITY INDEXES
(1989–90 = 100)

Period	Market sector			Non-farm market sector		
	Labour (a)	*Capital (b)*	*Multifactor (c)*	*Labour (a)*	*Capital (b)*	*Multifactor (c)*
			ANNUAL			
1988–89	100.6	100.1	100.4	101.5	100.9	101.2
1989–90	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	100.5	95.0	98.5	100.3	94.0	98.2
1991–92	103.6	93.4	99.8	103.5	92.4	99.8
1992–93	105.6	95.1	101.7	105.2	93.6	101.2
1993–94	109.5	99.4	105.8	108.9	97.5	105.1

(a) Constant price gross product per hour worked. (b) Constant price gross product per unit of capital stock. (c) Constant price gross product per combined unit of labour and capital.
Source: ABS, Australian National Accounts: Multifactor Productivity (5234.0).

Explanatory Notes

Productivity is the relationship between the output of an economic unit and the inputs, such as labour and capital, which have gone into producing that output. Productivity can be increased through better utilisation of resources.

Multifactor productivity (MFP) is a measure of the efficiency of the production process considering a number of inputs (factors). It is expressed as a ratio of output to a combined measure of two or more factor inputs (e.g. capital and labour).

The ABS measures MFP as the ratio of gross product to a combined measure of capital stock and hours worked. Growth in MFP can arise from technical progress, improvements in the work force, improvement in management practices, economies of scale and so on. It can be affected in the short to medium term by elements such as the weather and the business cycle which influence the amount produced.

Labour productivity is usually measured as the amount produced per hour worked. Quite clearly, this can be affected by technological changes and changes in other inputs (e.g. capital), as well as changes in labour efficiency.

Capital productivity is measured as the amount of output produced per unit of capital employed. Equipment, structures, land and inventories are forms of capital goods used in the production of goods and services.

Productivity measures are used by both government and private organisations to gauge the effect of changes in work practices, technology, education and training.

Further Reading

- ☐ *Occasional Paper: Estimates of Multifactor Productivity, Australia* (5233.0)
  This paper describes what the ABS indexes of multifactor productivity actually measure and provides full details of the methods used to derive them. It also examines the limitations of the indexes and attempts to quantify them. Alternative measures of MFP are described briefly.

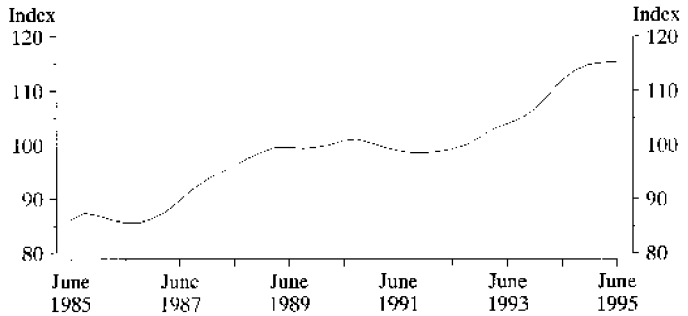
- ☐ *Australian National Accounts: Multifactor Productivity* (5234.0)
  This annual publication contains indexes of multifactor productivity for the market and non-farm market sectors. It also includes associated indexes such as labour productivity, capital productivity and the capital-labour ratio.

2.4.2 Indexes of Industrial Production

Comment

The index of total industrial production, in trend constant price terms, has generally increased over the 10 year period to June 1995 apart from three periods. The index decreased from 87.4 in September quarter 1985 to 85.7 in June quarter 1986 before generally rising to 101.1 in September quarter 1990. This was followed by a period of small quarterly decreases reaching 98.6 in September quarter 1991. From March quarter 1992, the index has continually increased reaching 115.3 in June quarter 1995.

INDEX OF TOTAL INDUSTRIAL PRODUCTION AT AVERAGE 1989–90 PRICES, TREND



Source: ABS 8125.0, Quarterly data

INDEXES OF INDUSTRIAL GROSS PRODUCT AT AVERAGE 1989–90 PRICES (1989–90 = 100.0)

Period	*Mining (excluding services to mining)*	*Manufacturing*	*Electricity, gas and water*	*Total*
		ANNUAL		
1989–90	100.0	100.0	100.0	100.0
1990–91	104.8	98.1	102.1	99.9
1991–92	107.1	95.7	103.3	98.9
1992–93	108.0	99.7	105.2	102.0
1993–94	109.9	107.4	106.6	107.7
1994–95	114.2	116.4	108.9	114.9
		QUARTERLY — TREND		
1993–94				
December	108.9	105.9	107.0	106.6
March	111.0	109.3	107.1	109.3
June	113.3	112.6	107.9	112.0
1994–95—				
September	114.3	115.0	108.7	113.9
December	114.3	116.2	109.4	114.9
March	114.8	116.6	109.3	115.2
June	115.1	116.7	108.8	115.3

Source: ABS, Quarterly Indexes of Industrial Production (8123.0).

Explanatory Notes

The indexes of industrial production provide estimates of the rises and falls in output by the mining; manufacturing; and electricity, gas and water industries.

The indexes are expressed in terms of constant prices. By eliminating the effects of price increases, the change in the real volume of output from industry groups can be determined.

Analysts in the public and private sectors use the indexes to determine the level of economic activity at both an overall and broad industry level.

The indexes reflect the growth and decline of output from specific industry groups.

Further Reading

- ☐ *Quarterly Indexes of Industrial Production, Australia* (8125.0)
  Presents indexes of gross product at constant prices for the industrial sector and each of its major component industries, i.e. mining; manufacturing; and electricity, gas and water. Also presents indexes for individual manufacturing subdivisions.

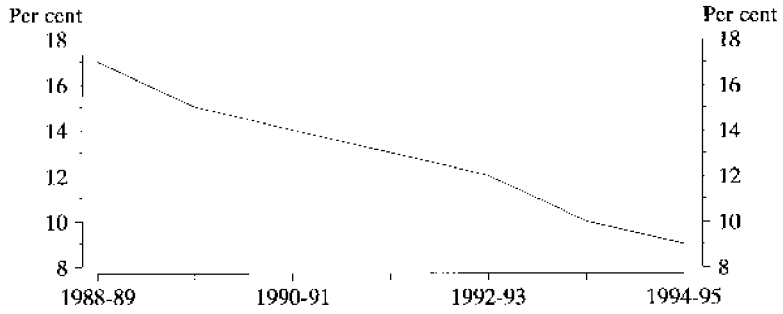
- ☐ *Manufacturing Industry, Australia* (8221.0)
  Contains annual estimates of the structure and performance of Australia's manufacturing industry.

2.4.3 Effective Rate of Assistance

Comment

The average effective rate of assistance to the manufacturing sector by the Commonwealth Government has decreased steadily from 17% in 1988–89 to 9% in 1994–95. Net assistance to the agricultural sector increased until 1990–91 before decreasing by 4 percentage points in 1991–92 and 1 percentage point in 1992–93. The decline in net assistance was partially reversed in 1993–94 with an increase of 2 percentage points in net assistance to the agricultural sector.

AVERAGE EFFECTIVE RATE OF ASSISTANCE, MANUFACTURING



Source: Industry Commission Annual Report, Annual data

AVERAGE EFFECTIVE RATES OF ASSISTANCE TO SELECTED INDUSTRY SECTORS
(per cent)

Period	*Agriculture (a)*	*Manufacturing (b)*
	ANNUAL	
1989–90	7	15
1990–91	15	14
1991–92	11	13
1992–93	10	12
1993–94	12	10
1994–95	n.y.a.	9

(a) From 1989–90, the agriculture series is based on an updated cost structure and is not directly comparable with previous series. (b) From 1989–90, the manufacturing series is based on most recently available data on materials usage from the ABS 1989–90 manufacturing census and is not comparable with previous series.
Source: Industry Commission Annual Report.

Explanatory Notes

The Industry Commission measures assistance provided to Australian industries by the Commonwealth Government.

The effective rate of assistance is an indicator of the net assistance to an industry. It is the percentage by which returns to resources (i.e. land, labour and capital) used in an industry are increased by assistance. It takes into account the assistance provided to an industry, less the extra costs the industry must pay for its inputs as a result of assistance to other industries.

The effective rate of assistance is positive if benefits provided by government to an industry outweigh costs imposed to that industry by government assistance to other industries. When the effective rate of assistance is negative, the benefits the industry receives from government assistance are outweighed by the extra costs it must pay for its inputs as a result of assistance to other industries.

The Commission's estimates of assistance include assistance provided by tariffs, quantitative import restrictions, certain export incentives and local content schemes and, for agricultural commodities, domestic pricing arrangements. Due to their differing impacts on particular sectors and data limitations, some forms of assistance, such as government purchasing preferences, offset arrangements and anti-dumping procedures, are excluded from the Commission's estimates.

The Government uses the effective rate of assistance to determine how much assistance is actually provided to an industry. When the Government formulates policy on protection for an industry, it must take into account the effect that the assistance will have on other industries. Lobby groups use effective rate of assistance estimates to argue for increases or decreases in industry protection.

Further Reading

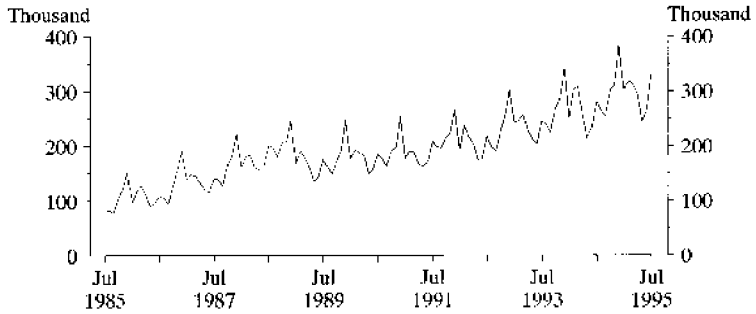
- ☐ *Industry Commission, Annual Report*
  Contains the average effective rate of assistance, analysis of recent movements and explanatory notes.

2.4.4 Tourism

Comment

Short-term overseas visitor arrivals into Australia shows seasonal variations with an overall upward trend. The number of short-term visitor arrivals showed strong improvement during Australia's 1988 Bicentenary celebrations. The series has continued to increase reaching 384,000 visitor arrivals in December 1994.

SHORT-TERM OVERSEAS VISITOR ARRIVALS



Source: ABS 3401.0, Monthly data

TOURISM

Period	*Capacity– hotels, motels and guest houses (guest rooms) (a)*	*Capacity– holiday flats, units and houses (number) (a)*	*Room occupancy rates – hotels, motels and guest houses (%) (b)*	*Unit occupancy rates – holiday flats, units and houses (%) (b)*	*Number of short-term overseas arrivals ('000)*
			ANNUAL		
1989–90	150,686	32,137	52.7	50.4	2,147.3
1990–91	158,608	32,313	50.1	48.7	2,227.4
1991–92	164,739	33,147	50.3	50.1	2,519.7
1992–93	167,006	33,775	51.7	50.9	2,785.6
1993–94	166,670	35,312	55.0	51.9	3,169.0
1994–95	167,752	38,168	57.9	52.7	3,535.3
			MONTHLY		
1993–94—					
May	n.a.	n.a.	51.2	38.2	214.9
June	166,670	35,312	52.5	45.3	230.9
1994–95—					
July	n.a.	n.a.	56.5	57.6	282.5
August	n.a.	n.a.	56.8	55.3	265.4
September	166,407	36,256	61.9	58.4	254.0
October	n.a.	n.a.	63.6	54.3	301.6
November	n.a.	n.a.	61.0	49.0	311.0
December	166,963	37,534	52.4	54.4	384.0
January	n.a.	n.a.	57.1	73.0	303.8
February	n.a.	n.a.	57.7	49.4	319.1
March	167,376	38,009	59.6	45.9	313.5
April	n.a.	n.a.	59.1	52.9	294.2
May	n.a.	n.a.	55.0	38.7	244.8
June	167,752	38,168	54.2	43.5	261.4
1995–96					
July	n.a.	n.a.	n.y.a.	n.y.a.	329.7

(a) All annual data are end of period. (b) All annual data are annual averages.
Sources: ABS, Tourist Accommodation, Australia (8635.0) and Overseas Arrivals and Departures, Australia (3401.0).

Explanatory Notes

Tourism is short-term travel away from the normal place of work and residence. This includes both domestic and international travel. Tourists spend money on a wide range of goods and services provided by many businesses.

Domestic tourism is the largest contributor to Australia's overall tourist market. When Australians holiday in Australia rather than going overseas, they spend money in Australia instead of overseas, that is Australia does not lose foreign exchange.

International tourism earns Australia foreign exchange. When tourists from overseas spend money in Australia, their currency is exchanged for Australian dollars. The foreign exchange earned from tourism can be used to finance imports and to service foreign debt.

The foreign exchange earned from tourism in Australia now exceeds earnings from many of Australia's more traditional export commodities. Tourism is seen as a growth industry which could play a role in securing Australia's future prosperity.

In order to identify the market that exists for Australia as a tourist destination, statistics on the country of residence of our international tourists are collected. This information is used to market and tailor our goods and services accordingly.

Statistics are collected on the capacity, occupancy rates and takings of tourist accommodation. The statistics are collected in order to observe the level of activity in the industry, geographical trends and seasonal trends. The information is used by government and private bodies to plan investment, marketing and policy for the tourism industry.

Further Reading

- ☐ *Directory of Tourism Statistics* (1130.0)
  Contains comprehensive information on sources of tourism statistics together with brief articles showing how each source may be used in relation to tourism.

- ☐ *Overseas Arrivals and Departures, Australia* (3401.0)
  Provides a summary of monthly data for all movements into and out of Australia. This includes details of overseas visitors by country of residence, intended length of stay and purpose of journey.

- ☐ *Tourism Indicators, Australia* (8634.0)
  Contains quarterly data on tourist accommodation by State, details on international tourism and other tourism statistics.

- ☐ *Tourist Accommodation, Australia* (8635.0)
  Contains quarterly data on capacity, occupancy rates and takings for establishments providing short-term accommodation for each State and Territory and Australia.

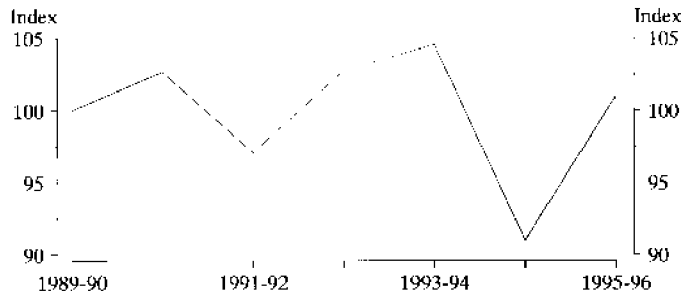
- ☐ *Hospitality Industries, Australia* (8674.0)
  Contains business size, employment, income and expenditure data as well as an historical overview of the hospitality industry.

2.4.5 Volume of Farm Production

Comment

Since 1989–90, the total volume of farm production peaked in 1993 94 but fell significantly in 1994–95 due to one of the worst droughts in Australia's recorded history. The major fall was in the production of crops, but this fall is forecast to be reversed in 1995–96. It is forecast that the production of livestock slaughterings and livestock products will continue to decline in 1995–96.

VOLUME OF TOTAL FARM PRODUCTION INDEX
(1989–90 = 100.0)



Source: Australian Bureau of Agricultural and Resource Economics

VOLUME OF FARM PRODUCTION INDEXES
(1989–90 = 100.0)

Period	*Crops*	*Livestock Slaughterings*	*Livestock Products*	*Total farm*
		ANNUAL		
1990 91	106.5	102.8	98.1	102.7
1991 92	100.5	106.0	86.0	97.1
1992 93	112.3	107.6	88.0	102.8
1993 94	116.0	109.0	88.0	104.6
1994 95 (a)	86.7	107.4	83.2	91.0
1995 96 (b)	115.9	105.1	80.2	101.0

(a) Preliminary (b) ABARE forecast.
Source: Australian Bureau of Agricultural and Resource Economics (ABARE).

Explanatory Notes

The farm sector is a significant contributor to Australia's total export income. The prosperity of farm industries therefore has a large impact on incomes in the rest of the economy.

Economic performance of the farm sector can be measured by the volume of farm production, which is produced in the form of an index by the Australian Bureau of Agricultural and Resource Economics (ABARE). The farm production index is broken into three categories: crops, livestock slaughterings and livestock products. Changes in the production of farm products which make up these categories cause the index to rise or fall, depending on whether production increases or decreases.

A rise in the volume of production is not always in the best interest of the producer. When a commodity has a large share of the world market, an increase in supply causes a fall in the price of the commodity, unless demand also increases.

The majority of Australia's farm commodities do not have a large share of the world market. The quantity of these commodities exported can increase without having a significant effect on the supply of the commodity on the world market and therefore little effect on the price received.

The Government and producer groups use the volume of farm production to estimate farm incomes. This information is used to formulate policy for farm industries and the general economy.

Further Reading

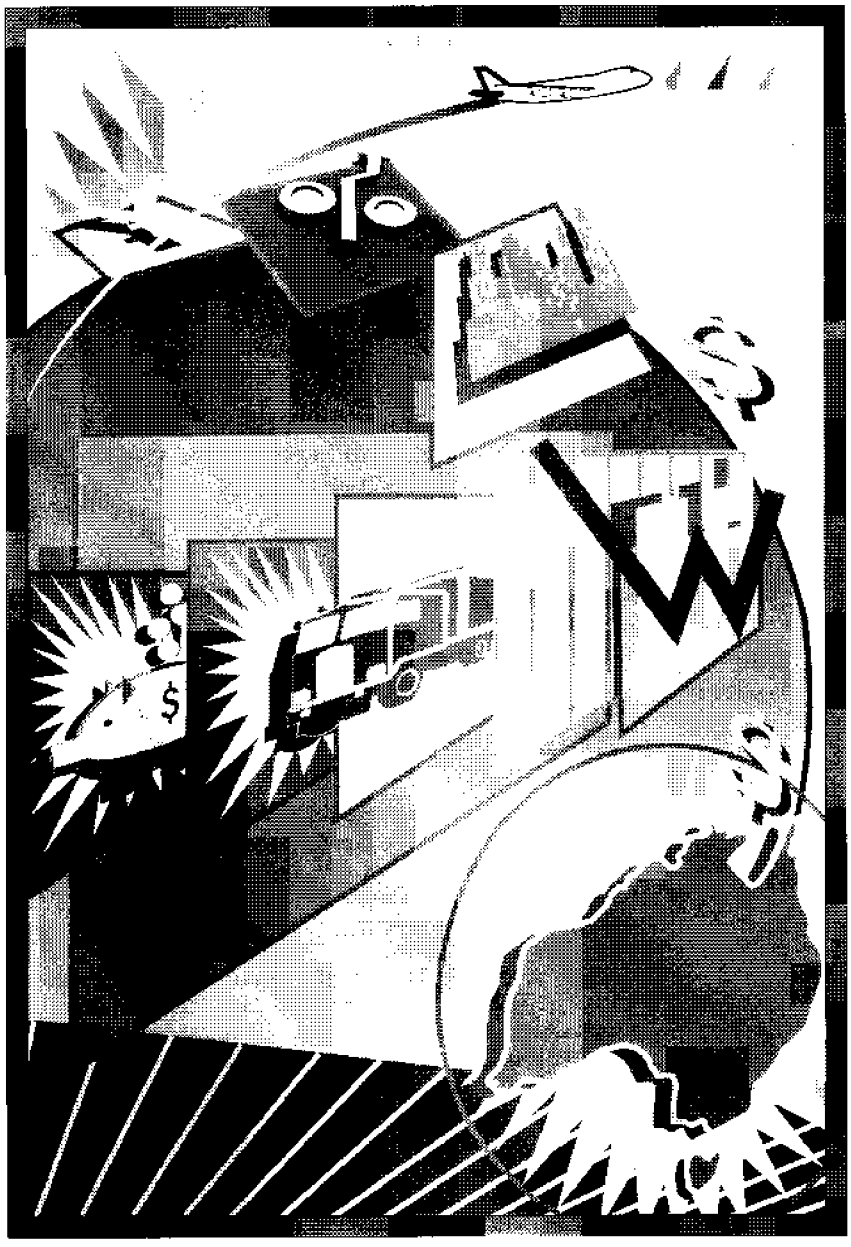
- ☐ *Agriculture, Australia* (7113.0)
  Covers structure of the farming sector and includes details on land use, crops, horticultural activity and livestock numbers. Also includes financial activity information.

- ☐ *Livestock Products, Australia* (7215.0)
  Provides statistics on livestock slaughterings, meat production, milk, wool and export data on live sheep, cattle and meat.

- ☐ *Value of Agricultural Commodities Produced, Australia* (7503.0)
  Contains the gross and local value of agricultural commodities, average unit gross values (i.e. prices) of principal crops, livestock, etc. and indexes of values at constant prices.

- ☐ *Australian Commodities*
  Contains Australian Bureau of Agricultural and Resource Economics (ABARE) forecast and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

- ☐ *Commodity Statistical Bulletin*
  Produced annually by the Australian Bureau of Agriculture and Resource Economics (ABARE) it contains resource and agricultural historical commodity data. Includes data on exports and imports, production and prices.



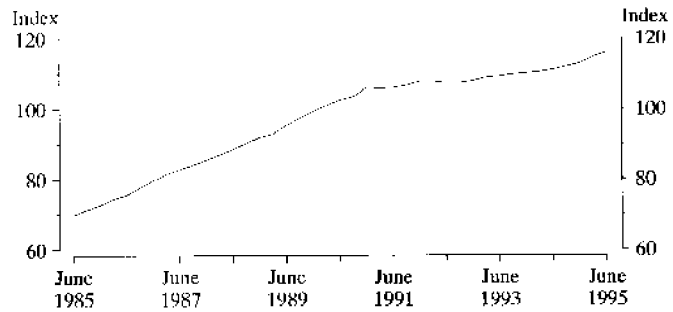
Section 2.5
Prices and Income

2.5.1 Consumer Price Index

Comment

The Consumer Price Index (CPI) increased steadily from 69.7 in June quarter 1985 to 106.0 in December quarter 1990. During this period the highest quarterly increase in the CPI was recorded in December quarter 1986 (2.8%). Since December quarter 1990 in which a quarterly increase of 2.6% was recorded, the rate of growth in the CPI has slowed considerably with the all groups actually falling in March quarter 1991 (0.2%) and June quarter 1992 (0.2%). In June quarter 1995, an increase in the CPI of 1.3% was recorded on the previous quarter.

CONSUMER PRICE INDEX: ALL GROUPS
(1989–90 = 100.0)



Source: ABS 6401.0, Quarterly data

CONSUMER PRICE INDEX: SELECTED GROUPS (a)
(1989–90 = 100.0)

Period	*Food*	*Clothing*	*Housing*	*All groups*
		ANNUAL AVERAGE		
1989–90	100.0	100.0	100.0	100.0
1990–91	103.3	104.6	103.5	105.3
1991–92	105.8	106.4	98.9	107.3
1992–93	107.4	107.5	94.6	108.4
1993–94	109.4	106.7	94.2	110.4
1994–95	112.1	106.7	100.0	113.9
		QUARTERLY		
1993–94—				
December	109.5	106.8	93.6	110.0
March	109.8	106.3	93.7	110.4
June	109.5	106.4	94.4	111.2
1994–95				
September	110.4	106.6	94.9	111.9
December	110.9	106.8	97.5	112.8
March	113.2	106.2	102.8	114.7
June	113.7	107.2	104.7	116.2

(a) Weighted average of eight capital cities.
Source: ABS, Consumer Price Index (6401.0).

Explanatory Notes

The Consumer Price Index (CPI) is a general indicator of the rate of change in prices paid by household consumers for the goods and services they buy. The simplest way of thinking about the CPI is to imagine a *basket of goods and services* of the kind bought by Australian households. As prices vary, the total price of this basket will also vary.

This basket of goods and services has been selected to represent purchases by metropolitan employee households and covers expenditure on the following broad items: food, clothing, housing, household equipment and operation, transportation, tobacco and alcohol, health and personal care as well as recreation and education. To ensure the basket remains representative of current spending habits, it is revised every 5 years.

The price of the CPI basket in the base period (currently 1989–90) is assigned a value of 100.0 and prices in other periods are expressed as percentages of the price in the base period. For example, if the price of the basket had increased by 15% since the base period the CPI would read 115.0.

The actual index number for any given period is therefore equal to:

$$\frac{\text{total cost of fixed basket in given period}}{\text{total cost of fixed basket in reference base period}} \times 100$$

The CPI has always been an important economic indicator and in recent years actions related to movements in the CPI have had direct or indirect effects on all Australians. For example, it has been used as a starting point in wage negotiations, to adjust Social Security and superannuation payments and in a range of business contracts.

The CPI is often loosely referred to as a 'cost of living index' but this is not correct. A true cost of living index, among other things, would need to take into account changes in standards of living and the substitutions that consumers make in order to maintain their standard of living in the face of changing market conditions (for instance, buying chicken instead of beef when beef prices are high). In contrast, the CPI assumes the purchase of a constant basket of goods and services and measures changes in the price of the goods and services in that basket alone.

Further Reading

- ☐ *Consumer Price Index* (6401.0)
  Presents quarterly movements in retail prices of goods and services commonly purchased by metropolitan wage and salary earners. Indexes are published for each of the State capitals, Canberra and Darwin.

- ☐ *A Guide to the Consumer Price Index* (6440.0)
  Contains information designed to promote the understanding of the CPI. It includes what the CPI is, to whom the CPI relates and how it is calculated.

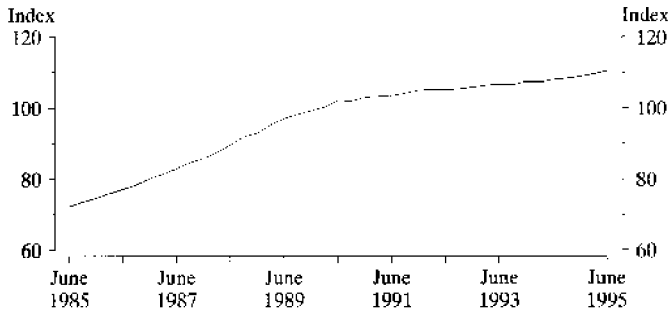
- ☐ *The Australian Consumer Price Index: Concepts, Sources and Methods* (6461.0)
  Contains a comprehensive description of the CPI with an insight into some of the problems the ABS encounters in compiling the CPI.

2.5.2 Implicit Price Deflator

Comment

The Implicit Price Deflator for Gross Domestic Product (GDP(E)) has increased steadily from 1983 84 to 1993–94. During this period, the greatest rate of annual increase (8.8%) was recorded from 1987–88 to 1988–89. Since then, the yearly rate of change of the implicit price deflator of GDP(E) has fallen to 1.1% in 1992–93 before increasing to 1.8% in 1994–95.

IMPLICIT PRICE DEFLATOR — GROSS DOMESTIC PRODUCT (GDP(E))
(1989–90 = 100.0)



Source: ABS, Australian National Accounts, 5206.0

IMPLICIT PRICE DEFLATOR

Period	*Implicit Price Deflator*
ANNUAL	
1989–90	100.0
1990–91	103.1
1991–92	105.0
1992–93	106.2
1993–94	107.5
1994–95	109.4
QUARTERLY — SEASONALLY ADJUSTED	
1993–94—	
December	107.5
March	107.3
June	108.0
1994–95	
September	108.4
December	108.8
March	109.6
June	110.5

Source: ABS, Australian National Accounts (5206.0).

Explanatory Notes

An implicit price deflator (IPD) is one of the other indexes in addition to the Consumer Price Index which measure price change. IPD indexes are obtained by dividing a current price value by its corresponding constant price value. The general formula for an IPD in period i is:

$$IPD_i = [(\Sigma P_i.Q_i) / (\Sigma P_o.Q_i)].100$$

where P_i = prices period i, P_o = base period prices, Q_i = quantities period i. (Hence $\Sigma P_i.Q_i$ represents the total current price value and $\Sigma P_o.Q_i$ represents the total constant price value in period i.)

Unlike the CPI and other ABS price indexes that relate to a fixed basket of goods and services, IPD's relate to a changing basket of goods and services. Hence, changes in an IPD from one period to another generally reflect compositional changes as well as price changes.

When calculated from the major national accounting aggregates, such as gross national expenditure (GNE), IPDs relate to a broader range of goods and services in the economy than that represented by any of the individual retail and wholesale price indexes published by the ABS.

The IPD of GNE is an indicator of overall movement in the prices of all final goods and services *purchased* by Australian residents, including imported goods. Because increase in stocks is subject to extreme compositional changes, IPD of domestic final demand (i.e. GNE other than increase in stocks and statistical discrepancy) is considered to be a more useful indicator of domestic price change than is the IPD for GNE itself.

The IPD of gross domestic product (GDP) is another broad measure of price change available in the national accounts. It provides an indication of the overall movement in the prices of goods and services *produced* in Australia, whether for use in the domestic economy or for export.

IPDs are subject to revision because of the revisions in the relevant current price and/or constant price estimates, including changes to seasonally adjusted estimates resulting from seasonal re-analysis.

Further Reading

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5204.0).
  Provides implicit price deflators for several series including gross national expenditure and gross domestic product over a 12-year period. They are derived using the base 1989–90 = 100.0.

- ☐ *Australian National Accounts: National Income, Expenditure and Product* (5206.0).
  Contains implicit price deflators derived from both trend and seasonally adjusted quarterly data for domestic final demand, gross national expenditure, gross domestic product (GDP(E)), gross farm product, gross non-farm product and terms of trade.

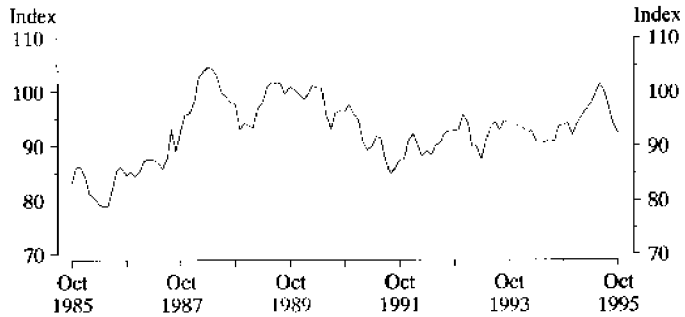
- ☐ *A Guide to the Australian National Accounts* (5235.0).
  Contains information on the construction and relevant uses of various implicit price deflators produced by the ABS.

2.5.3 RBA Commodity Price Index

Comment

The Reserve Bank of Australia (RBA) index of commodity prices generally increased from a low of 78.6 in May 1986 to a peak of 107.2 in April 1988 reflecting the increase in prices received for Australia's exports. The index fluctuated sharply before beginning a more gradual decline to 86.5 in September 1991. Since then, the series slowly recovered to 101.5 in June 1995 before decreasing to 92.5 in October 1995.

RBA INDEX OF COMMODITY PRICES
(1989–90 = 100.0)



Source: Reserve Bank of Australia Bulletin, Monthly data

RBA INDEX OF COMMODITY PRICES (a)
(1989–90 = 100)

Period	*All items*
ANNUAL	
1989–90	100.0
1990–91	92.9
1991–92	88.6
1992–93	91.5
1993–94	92.5
1994–95	95.2
MONTHLY	
1994–95—	
August	90.8
September	93.7
October	93.8
November	94.3
December	92.0
January	94.1
February	95.5
March	96.7
April	97.8
May	99.6
June	101.5
1995–96	
July	99.9
August	97.2
September	94.2
October	92.5

(a) Monthly average data.
Source: Reserve Bank of Australia Bulletin (RBA).

Explanatory Notes

The Reserve Bank of Australia (RBA) developed the commodity price index to provide an early indication of trends in Australia's export prices. There are 17 commodities included in the index representing approximately 75% of Australia's commodity exports. The commodities are weighted according to the quantity exported by volume over the previous 12 months. The weights given to each commodity can vary over time to allow for changes in the composition of exports.

Rural and non-rural components are calculated as well as total commodities. In December 1992 rural commodities made up 38% of the index, with wool, wheat and beef being the main rural commodities. Non-rural commodities make up the rest of the index, with coking and steaming coal, iron ore and gold being the main non-rural commodities.

The Government and private enterprise use the RBA commodity price index to predict Australia's export earnings and future economic prospects.

Further Reading

- ☐ *Reserve Bank of Australia Bulletin*
  Presents monthly estimates for the Reserve Bank of Australia commodity price index for rural, non-rural and all items. See article in the April 1993 issue for an explanation of the index.

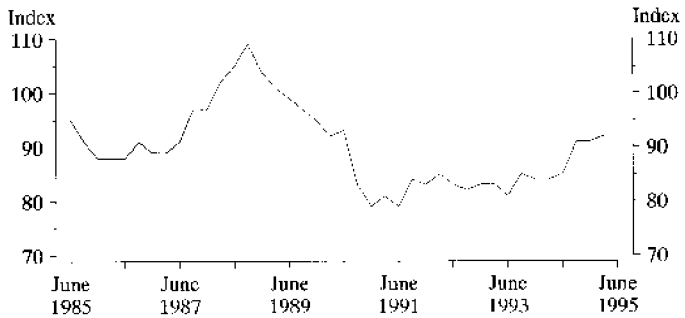
- ☐ *Reserve Bank of Australia Index of Commodity Prices*
  Monthly Reserve Bank of Australia press release containing the commodity price index.

2.5.4 Prices Received and Paid by Farmers

Comment

From June quarter 1987 to September quarter 1988, the farmers' terms of trade index showed marked improvement. From then to December quarter 1990, a decline in the index occurred due to falls in prices received while prices paid continued to increase. Between September quarter 1991 and June quarter 1994, the farmers' terms of trade stabilised, fluctuating within a band of 4 index points. Since then, the index has risen and at June quarter 1995 was 91.9.

FARMERS' TERMS OF TRADE INDEX
(1987–88 = 100.0)



Source: Australian Bureau of Agricultural and Resource Economics

INDEXES OF PRICES RECEIVED AND PAID BY FARMERS
(1987–88 = 100.0)

Period	*Prices received*	*Prices paid*	*Farmers' terms of trade(a)*
	ANNUAL		
1989 90	109.1	116.3	93.9
1990 91	94.8	117.6	80.6
1991 92	98.4	117.4	83.8
1992 93	96.3	116.8	82.4
1993 94	101.2	119.8	84.4
1994 95 p	112.9	123.4	91.5
	QUARTERLY		
1993–94			
December	100.4	119.5	84.0
March	101.3	120.3	84.2
June	101.8	120.5	84.5
1994–95— p			
September	109.6	120.5	90.9
December	109.9	120.7	91.0
March	114.5	124.2	92.2
June p	117.7	128.1	91.9

(a) Ratio of index of prices received by farmers and index of prices paid by farmers.
Source: Indexes of Prices Received and Paid by Farmers (ABARE).

Explanatory Notes

The Australian Bureau of Agricultural and Resource Economics (ABARE) produces indexes of prices received and prices paid by farmers. The indexes measure movements in the price of fixed baskets of goods and services that farmers sell and purchase, respectively.

The indexes of prices received and paid by farmers are not indicators of farmers' incomes or costs, but are used to determine farmers' terms of trade. Farmers' terms of trade is equal to the ratio of prices received to prices paid. Farmers experience a rise in their terms of trade when, for example, the average level of prices they receive increase at a faster rate than the average level of prices paid. Farmers experience a fall in their terms of trade when, for example, the prices they pay increase at a faster rate than the prices they receive.

ABARE uses farmers' terms of trade along with other information to assist in the projection of income levels for producers of specific commodities. The Government uses the forecasts to formulate economic policy regarding marketing of primary products, guaranteed prices, subsidies to primary producers and overseas trade policy.

Further Reading

- *Agricultural Industries, Financial Statistics, Australia* (7507.0)
  Contains detailed information for farm businesses about turnover, expenses, profitability, capital spending, asset values, indebtedness and net worth. The information is available for individual agricultural industries at the State and national levels.

- *Indexes of Prices Received and Paid by Farmers*
  Contains Australian Bureau of Agricultural and Resource Economics (ABARE) quarterly indexes of the prices received and paid by farmers, at the Australian and State level, as well as explanatory notes on the indexes themselves.

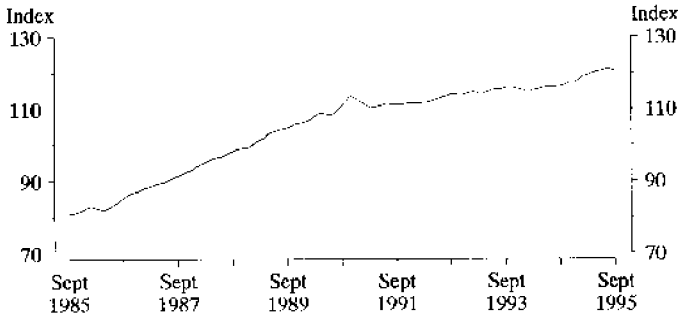
- *Australian Commodities*
  Contains Australian Bureau of Agricultural and Resource Economics (ABARE) forecast and historical data for agriculture and resource commodities. Includes data on quantity and value of production, quantity and value of exports, value of imports of selected commodities, annual and quarterly prices and world production and consumption, stocks and trade for selected commodities.

2.5.5 Producer Price Indexes

Comment

The price index of articles produced by the manufacturing industry displayed steady growth from the mid-to-late 1980s. A slower rate of growth was recorded in the 1990s with the exception of the period from July 1990 to November 1990 which recorded an increase of 4.9 index points. Since then, slow growth and falls have been recorded in the index. From July 1995 to September 1995, the index fell by 0.6 index points.

PRICE INDEX OF ARTICLES PRODUCED BY THE MANUFACTURING INDUSTRY (1988–89 = 100.0)



Source: ABS 6412.0, Monthly data

SELECTED PRODUCER PRICE INDEXES: ALL GROUPS

Period	*Price index of materials used used in building (other than house building)(a)*	*Price index of materials used in house building (b)*	*Price index of materials used in manufacturing (c)*	*Price index of articles produced by manufacturing (d)*
		ANNUAL AVERAGE		
1989 90	100.0	135.8	119.0	106.5
1990 91	105.1	142.1	123.8	111.2
1991 92	105.7	142.4	120.7	111.6
1992 93	106.0	145.2	126.6	114.3
1993 94	107.5	152.1	124.6	115.5
1994 95	110.4	156.7	128.1	118.1
		MONTHLY		
1994–95				
July	109.1	154.5	125.1	116.2
August	109.2	155.0	125.6	116.2
September	109.3	155.3	124.6	116.3
October	109.5	155.8	125.1	116.8
November	109.9	156.4	125.3	117.3
December	110.2	157.0	124.5	117.3
January	110.5	157.0	126.1	118.1
February	110.9	157.5	128.9	119.1
March	111.2	157.8	130.5	119.4
April	111.3	157.9	131.9	119.9
May	111.6	158.6	134.0	120.4
June	111.8	158.0	135.4	120.6
1995–96—				
July	112.4	158.1	134.0	121.1
August	112.4	157.8	132.3	121.0
September	112.5	157.6	131.1	120.5

(a) Base year 1989 90 = 100.0. (b) Base year 1985–86 = 100.0. (c) Base year 1984–85 = 100.0. (d) Base year 1988–89 = 100.0.
Sources: ABS, Price Index of Materials Used in Building other than House Building, Eight Capital Cities (6407.0), Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (6408.0), Price Index of Articles Produced by Manufacturing Industry, Australia (6412.0) and Price Indexes of Materials used in Manufacturing Industries, Australia (6411.0).

Explanatory Notes

Producer price indexes measure movements in the prices of goods for various sectors of the Australian economy. They are important economic indicators.

The indexes relate to three broad sectors of the Australian economy: building industry, manufacturing industry and the coal mining industry. The producer price indexes measure changes in prices of materials used in the production processes for each of the sectors, as well as articles produced by the manufacturing sector.

Most of the prices used in the indexes are collected as at the mid-point of each month. They reflect, as far as possible, actual transaction prices, including all forms of discounting.

The indexes are used by both the public and private sectors, primarily for adjusting business contracts, as well as for economic analysis.

Further Reading

- *Price Index of Materials Used in Building Other than House Building, Six State Capital Cities* (6407.0)
  Contains measurements of monthly price movements of materials delivered on site for use in the construction of buildings other than houses.

- *Price Index of Materials Used in House Building, Six State Capital Cities* (6408.0)
  Contains measurements of monthly price movements of materials delivered on site for use in the construction of houses.

- *Price Indexes of Copper Materials, Australia* (6410.0)
  Presents indexes which measure monthly price movements in copper materials used in the manufacture of electrical equipment.

- *Price Indexes of Materials Used in Manufacturing Industries, Australia* (6411.0)
  Contains indexes which measure the monthly price movements of materials and fuels used by establishments engaged in manufacturing.

- *Price Indexes of Articles Produced by Manufacturing Industry, Australia* (6412.0)
  Contains indexes which measure the monthly price movements of articles produced by establishments engaged in manufacturing.

- *Price Indexes of Materials Used in Coal Mining, Australia* (6415.0)
  Contains measurements of monthly price movements of materials used in the mining of coal, for underground mining and open-cut mining.

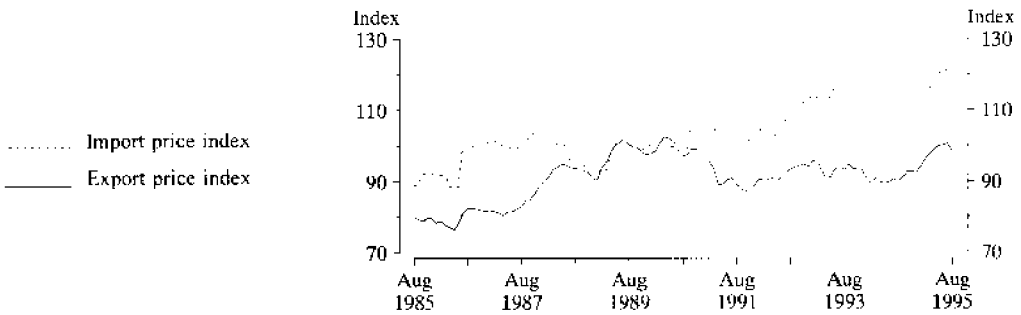
- *Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods* (6419.0)
  Provides a comprehensive description of the producer and foreign trade price indexes. Topics covered include what the indexes measure and how the indexes are produced.

2.5.6 Foreign Trade Price Indexes

Comment

Movement in both the export and import price indexes has been variable. The export price index recorded an overall upward trend in the late 1980s. The index then fell to 87.3 in October 1991 and has continued to fluctuate reaching 100.6 in July 1995 before falling to 98.6 in August 1995. The import price index fluctuated during the late 1980s. A general upward trend began in April 1989 reaching 121.4 in June 1995, before decreasing to 118.2 in August 1995.

IMPORT AND EXPORT PRICE INDEXES
(1989–90 = 100.0)



Source: ABS 6405.0, Monthly data; ABS 6414.0, Monthly data

FOREIGN TRADE PRICE INDEXES: ALL GROUPS (1989–90 = 100.0)

Period	*Export price index*	*Import price index*
	ANNUAL AVERAGE	
1989–90	100.0	100.0
1990–91	95.1	103.2
1991–92	89.6	102.7
1992–93	93.5	112.1
1993–94	91.8	115.6
1994–95	94.7	114.8
	MONTHLY	
1993–94		
June	89.8	112.6
1994–95—		
July	90.6	113.7
August	90.0	113.2
September	91.0	113.2
October	92.7	113.4
November	92.7	112.7
December	92.4	110.6
January	93.9	111.3
February	96.1	113.7
March	97.5	116.2
April	98.9	118.0
May	99.9	120.1
June	100.3	121.4
1995–96		
July	100.6	121.0
August	98.6	118.2

Sources: ABS, Export Price Index, Australia (6405.0) and Import Price Index, (6414.0).

Explanatory Notes

Foreign trade price indexes measure the price of goods leaving and entering Australia. There are two foreign trade price indexes, the export price index and the import price index.

The export price index measures changes in the prices of exports of merchandise from Australia. The import price index measures changes in prices of imports of merchandise into Australia.

In general, prices are obtained from major exporters and importers of the selected commodities included in each index. The prices used in the indexes relate to the month in which the goods physically leave and enter Australia. They are collected on a free on board (f.o.b.) basis. Freight and insurance charges involved in shipping the goods to and from Australian ports are excluded.

The prices used in both the export and import indexes are expressed in Australian dollars. For this reason changes in the relative value of the Australian dollar against overseas currencies will affect both price indexes. An appreciation of the Australian dollar has a downward influence on both indexes, while a depreciation has an upward influence.

The indexes are used by both the public and private sectors for both economic analysis and adjusting business contracts. The indexes are also used as input into other ABS statistics, such as constant price estimates of the national accounts.

Further Reading

- *Export Price Index, Australia* (6405.0)
  Measures changes in free on board (f.o.b.) Australian port-of-origin prices of merchandise exports.

- *Import Price Index, Australia* (6414.0)
  Measures price movements of imports of merchandise landed in Australia.

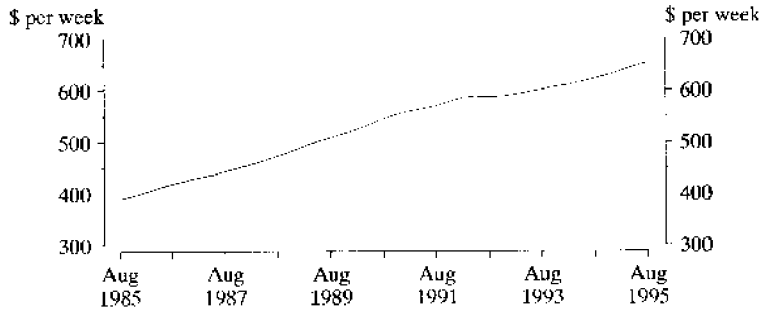
- *Producer and Foreign Trade Price Indexes: Concepts, Sources and Methods* (6419.0)
  Provides a comprehensive description of the foreign trade price indexes. It includes what the indexes measure and how the indexes are produced.

2.5.7 Average Weekly Earnings

Comment

Average weekly ordinary time earnings, for full-time adults, showed relatively constant growth from August 1985 to August 1991 with an average annual growth rate of 6.6%. Growth then slowed until 1993, particularly over 1992–93 when average weekly earnings decreased in August quarter 1992. Average weekly earnings then recommenced steady growth and an increase of 5.1% was recorded from August 1994 to August 1995.

FULL-TIME ADULT AVERAGE WEEKLY ORDINARY TIME EARNINGS — PERSONS, TREND



Source: ABS 6302.0. Quarterly data

FULL-TIME ADULT AVERAGE WEEKLY ORDINARY TIME EARNINGS — AUSTRALIA
($ per week)

Period	*Males*	*Females*	*Persons*
	ANNUAL AVERAGE (a)		
1989–90	552.20	458.30	521.00
1990–91	588.20	491.40	555.40
1991–92	615.40	516.20	580.80
1992–93	627.10	525.70	591.00
1993–94	645.90	542.80	609.10
1994–95	673.00	564.10	633.90
	QUARTERLY—TREND		
1993–94—			
February	647.10	544.20	610.50
May	652.70	550.30	616.20
1994–95			
August	659.80	555.80	622.70
November	668.00	560.60	629.60
February	677.40	566.60	637.60
May	686.90	573.80	646.00
1995–96—			
August	695.60	581.10	654.20

(a) Derived as annual average of average weekly earnings in the specified pay period in each quarter.
Source: Average Weekly Earnings, States and Australia (6302.0).

Explanatory Notes

The ABS collects information from approximately 5,000 employers every quarter to determine estimates of average weekly earnings. Employers are asked to provide details of the total gross weekly earnings paid to employees (including weekly overtime earnings) and the number of employees involved (split into full-time adults and all other employees, by males and females).

The most obvious change in average weekly earnings occurs when wages have increased or decreased as a result of National Wage increases, or agreements between employers and employees, or because of changes to award conditions.

A change in average weekly earnings is not necessarily a reflection of changes in wages but may be due to changes in the composition of the wage and salary earner segment of the labour force. Changes in the type of employment (part-time, full-time), the age of the workforce, the occupational make-up of the workforce and the amount of overtime all affect average weekly earnings.

If average weekly earnings increase while the level of employment and composition of the wages and salary segment of the labour force remain the same, expenditure on wages rises. If the increase in expenditure on wages is not accompanied by an increase in production, labour costs per unit of output produced will rise.

Governments, unions, employer groups, researchers and private bodies use average weekly earnings as a guide to changes in the labour market, and as an indicator of the level of economic activity. Average weekly ordinary time earnings is used in some contracts to adjust for increases in labour costs.

Further Reading

- ☐ *Average Weekly Earnings, States and Australia* (6302.0)
  Contains quarterly estimates of average weekly ordinary time earnings and average weekly total earnings for full-time adult employees and average weekly total earnings for all employees, males, females and persons, classified by sector and State and Territory.

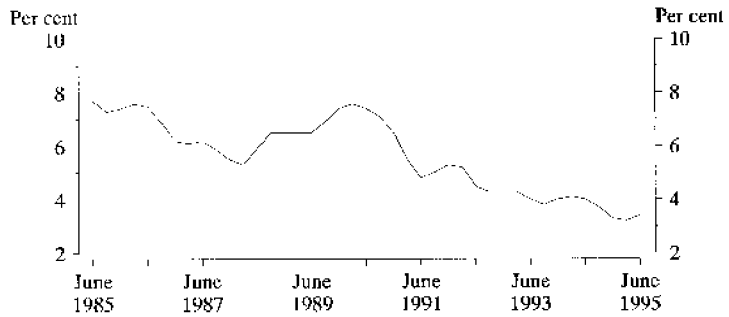
- ☐ *Average Weekly Earnings, Australia, 1941 –1990* (6350.0)
  Contains an historical series of average weekly earnings for all males for Australia from September quarter 1941 to November 1990, as well as average weekly earnings estimates for all employees from August 1981, classified into a number of categories.

2.5.8 Saving

Comment

The household saving ratio in trend estimate terms has generally fallen over the period from June 1985 to June 1995. Improvements have been recorded and the ratio reached a peak during this period of 7.6% in March quarter 1990. However the household saving ratio has since fallen reaching its lowest level (3.2%) over this period in March quarter 1995.

HOUSEHOLD SAVING RATIO, TREND



Source: ABS 5206.0, Quarterly data

HOUSEHOLD SAVING

Period	*Saving (a) ($m)*	*Household disposable income ($m)*	*Household saving ratio (%)*
	ANNUAL		
1989 90	15,937	233,365	6.8
1990 91	13,792	243,783	5.7
1991 92	12,641	254,676	5.0
1992 93	11,433	264,552	4.3
1993 94	12,405	276,582	4.5
1994 95	8,675	291,156	3.0
	QUARTERLY — TREND		
1993–94			
December	2,705	68,312	4.0
March	2,860	69,459	4.1
June	2,838	70,518	4.0
1994–95—			
September	2,646	71,403	3.7
December	2,407	72,356	3.3
March	2,355	73,524	3.2
June	2,509	74,861	3.4

(a) Saving is derived as a balancing item.
Source: ABS, Australian National Accounts: National Income and Expenditure (5206.0).

Explanatory Notes

Saving is the excess of income over outlays for each sector in the economy during a given period. Saving can be seen as giving up current consumption to derive a future benefit because it is used to finance investment which, at the national level, will increase the productive capacity to produce a greater quantity of goods and services in the future.

Household disposable income is the amount of income that households have available for spending after deducting from total income any taxes paid, interest payments and transfers to overseas. The ratio of household income saved to household disposable income is called the household saving ratio. Australia's household saving ratio has generally been on a downward trend since reaching a high point in the mid 1970s.

For businesses, saving is referred to as undistributed income or retained earnings. For governments, saving is referred to as the surplus on current transactions.

If total saving in the domestic economy from the above sources and from depreciation allowances (sometimes referred to as 'consumption of fixed capital') is not enough to cover planned investment, then the nation must borrow from foreign countries to finance its investment. Historically, Australia has relied heavily on foreign borrowing to finance its investment. In effect, we have chosen to consume now rather than to save for investment.

Governments and private organisations are interested in changes in the level of saving because of the effect on investment and Australia's borrowing requirements from overseas.

Further Reading

- *Australian Economic Indicators* (1350.0)
  See feature article *A Framework for Household Income, Consumption, Saving and Wealth* in the July 1995 issue.

- *Australian National Accounts: National Income, Expenditure and Product* (5204.0)
  Contains detailed presentation of the National accounts for the last 12 years and an historical series from 1948–49 to the current year.

- *Australian National Accounts: National Income, Expenditure and Product* (5206.0)
  Contains quarterly data, including household income and expenditure. Measures of national saving and saving for individual institutional sector (government, businesses and households) can be found in the income and outlay accounts.

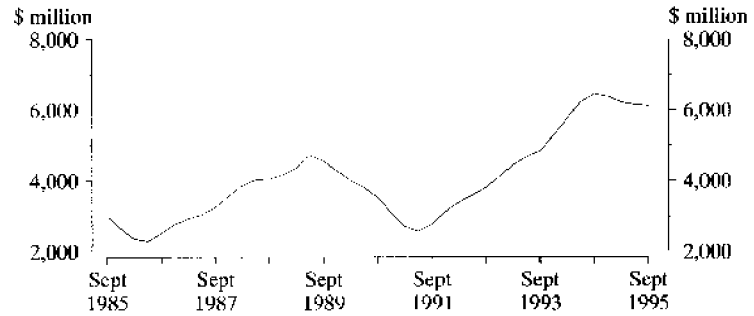
- *A Framework for Household Income, Consumption, Saving and Net Worth* (6549.0)
  A conceptual framework setting out the relationship between household income, consumption, saving and changes in net worth. Shows links with the national accounts.

2.5.9 Company Profits

Comment

Company profits in trend estimate terms rose from $2,283m in June quarter 1986 to $4,712m in June quarter 1989 during a period of strong growth. Company profits then fell sharply to $2,567m in June quarter 1991 but have since far exceeded 1989 levels, recording $6,459m in September quarter 1994. Since then, the series has fallen to $6,113m in September quarter 1995.

COMPANY PROFITS BEFORE TAX, TREND



Source: ABS 5651.0, Quarterly data

COMPANY PROFITS BEFORE INCOME TAX (a)
($ million)

Period	*Mining*	*Manufacturing*	*Wholesale and retail trade*	*Other selected industries*	*Total*
		ANNUAL			
1989–90	4,947	8,159	2,864	179	16,512
1990–91	5,930	4,866	1,882	712	12,310
1991–92	5,048	5,746	1,905	218	12,875
1992–93	5,268	7,983	2,822	587	16,984
1993–94	4,827	10,655	3,590	2,248	21,689
1994–95	4,665	12,609	5,031	2,335	25,173
		QUARTERLY — TREND			
1993–94—					
March	1,184	2,802	1,006	645	5,736
June	1,156	2,978	1,222	766	6,230
1994–95					
September	1,161	3,099	1,332	758	6,459
December	1,162	3,213	1,318	567	6,386
March	1,172	3,216	1,230	473	6,231
June	1,214	3,056	1,134	610	6,151
1995–96—					
September	1,273	2,771	1,071	879	6,113

(a) Excludes public sector and unincorporated sector. Also excludes companies with 30 employees or fewer and all companies classified to agriculture, forestry, fishing, hunting, banking, non-bank finance, insurance, unit trusts, land trusts, mutual funds and community services.
Source: ABS, Company Profits, Australia (5651.0).

Explanatory Notes

Company profits are defined as net operating profits or losses before income tax.

Statistics on company profits are collected quarterly by broad industry. Also collected in the survey of company profits are depreciation of fixed assets and interest paid and received. Industries included are mining, manufacturing, wholesale and retail trade and other selected industries which include construction, transport and storage, services to finance and insurance and property and business services. Companies excluded are those primarily engaged in agriculture, forestry, fishing and hunting, finance, insurance and community services activities.

The ABS also publishes information quarterly on expected profit. Additional information on profit on an annual basis is also published.

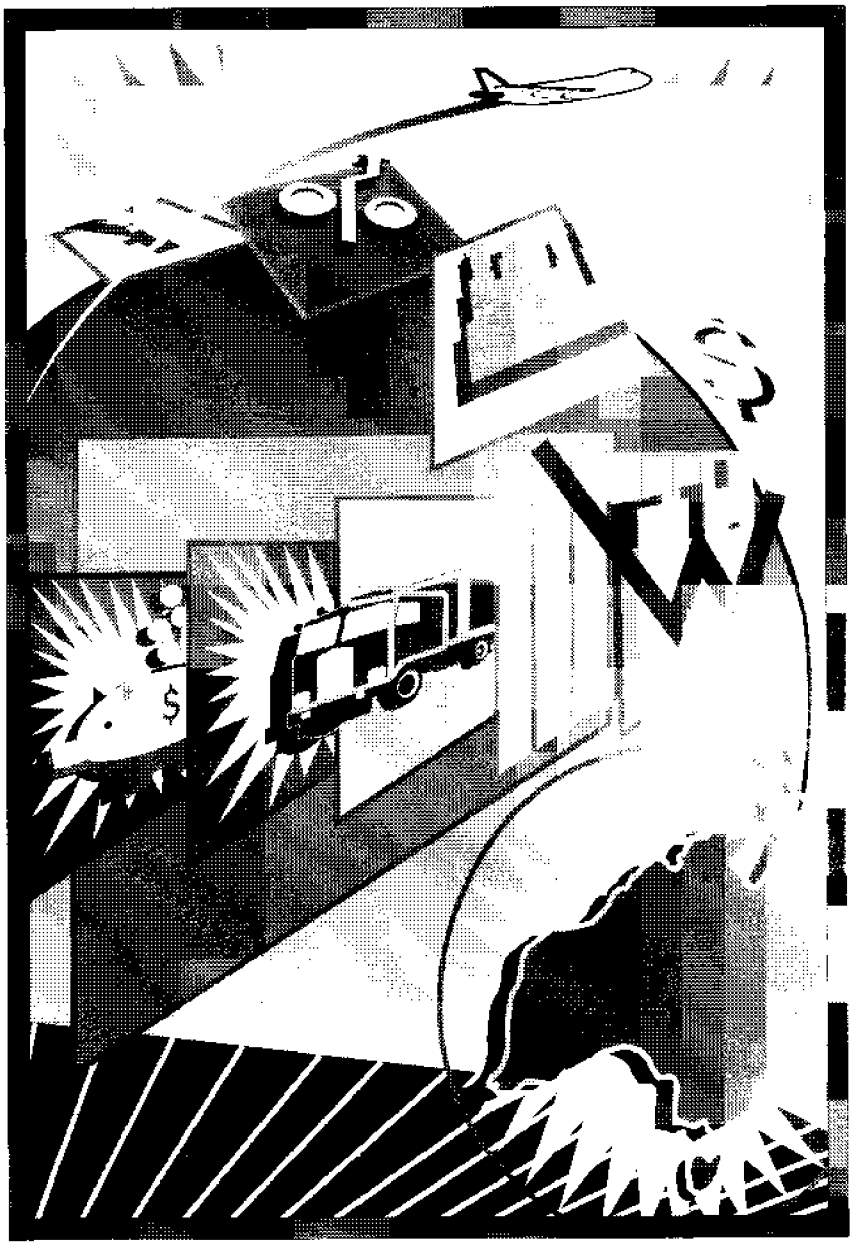
Government and other economists and analysts use statistics on company profits as a short-term indicator of economic activity. During periods of economic growth there is likely to be a higher level of company profits than in periods of economic decline.

Further Reading

- ☐ *Australian Business Expectations* (5250.0)
  Provides estimates of percentage change in key business performance indicators of businesses. The data are presented by industry sector and size of business.

- ☐ *Company Profits, Australia* (5651.0)
  Contains quarterly estimates of company profits of selected business enterprises. The data are presented by industry and expressed in original, seasonally adjusted and trend terms.

- ☐ *Business Operations and Industry Performance, Australia* (8140.0)
  Presents economic statistics based on profit and loss statements and balance sheet accounts of businesses in most industries of the Australian economy. Included is a measure of net profit and profitability.



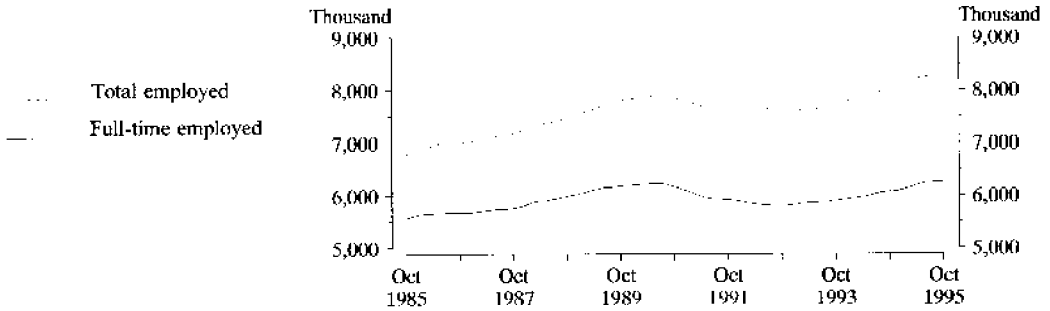
Section 2.6
Labour Force and Demography

2.6.1 Employment

Comment

The trend estimate of the number of both full-time and total workers rose steadily in the late 1980s to reach 6.23 million and 7.89 million persons, respectively, in June 1990. Since then, full-time employment reached a low of 5.81 million persons in October 1992 and total persons employed reached a low of 7.62 million in January 1993. In June 1994, total employment reached 7.90 million, exceeding the June 1990 peak. In June 1995, full-time employment, at just over 6.23 million, also exceeded the June 1990 peak.

EMPLOYED PERSONS, TREND



Source: ABS 6203.0, Monthly data

EMPLOYED PERSONS ('000)

Period	*Full-time aged 15–19 years*	*Full-time aged 20+ years*	*Total full-time*	*Total part-time*	*Total*
		ANNUAL AVERAGE — TREND			
1989–90	435.2	5,758.2	6,194.7	1,639.1	7,833.8
1990–91	357.1	5,736.5	6,091.8	1,688.6	7,780.4
1991–92	271.7	5,613.0	5,887.4	1,754.1	7,641.5
1992–93	247.3	5,589.8	5,834.4	1,796.9	7,631.3
1993–94	231.9	5,697.4	5,931.1	1,852.3	7,783.5
1994–95	245.6	5,873.5	6,118.6	1,972.9	8,091.5
		MONTHLY — TREND			
1994–95					
August	240.8	5,807.4	6,048.2	1,911.6	7,959.7
September	242.9	5,819.0	6,061.8	1,924.4	7,986.2
October	244.5	5,826.2	6,070.7	1,940.2	8,010.9
November	246.0	5,832.7	6,078.7	1,958.1	8,036.9
December	247.7	5,842.6	6,090.2	1,976.0	8,066.3
January	249.4	5,858.8	6,108.2	1,991.8	8,100.0
February	250.2	5,882.5	6,132.7	2,004.1	8,136.8
March	249.3	5,912.0	6,161.3	2,012.4	8,173.7
April	246.9	5,944.2	6,191.1	2,017.7	8,208.8
May	244.0	5,972.2	6,216.2	2,019.2	8,235.4
June	241.1	5,992.5	6,233.6	2,018.2	8,251.8
1995–96—					
July	238.8	6,004.4	6,243.2	2,017.1	8,260.3
August	237.3	6,011.8	6,249.0	2,016.6	8,265.7
September	236.2	6,016.5	6,252.7	2,018.2	8,271.0
October	235.3	6,019.3	6,254.6	2,022.0	8,276.6

Source: ABS, The Labour Force, Australia (6203.0).

Explanatory Notes

Each month the ABS collects data on the number of employed and unemployed persons. This information is gathered from the Labour Force Survey, a monthly sample survey of private dwellings and non-private dwellings (e.g. hotels, motels).

The survey is used to determine the labour force status of the civilian population aged 15 years and over. Not included are members of the permanent defence forces, diplomatic and defence personnel from overseas countries and overseas residents in Australia. The Labour Force Survey classifies individuals as employed, unemployed or not in the labour force.

Employed persons are persons aged 15 years and over, who during the reference week, (a) worked one hour or more for payment of any kind or profit in a job, business or farm or (b) worked one hour or more without pay in a family business or farm or (c) were employees who had a job but were not at work for various defined reasons or (d) were employers, own account workers or contributing family workers who had a job but were not at work. Full-time workers are employed persons who usually work more than 35 hours a week or did so during the reference week.

Estimates of employment and unemployment are primarily indicators of economic activity and, as such, are used by government departments, financial markets, industry organisations and research organisations to monitor the economy's performance and to develop economic policy. However, employment and particularly unemployment are also social indicators and are used by government departments, research organisations and welfare organisations as indicators of social conditions.

Further Reading

- ☐ *Labour Statistics, Australia* (6101.0)
  Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

- ☐ *The Labour Force, Australia* (6203.0)
  Contains labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed, duration unemployed, country of birth and year of arrival in Australia.

- ☐ Information Paper: *Measuring Employment and Unemployment* (6279.0)
  Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

- ☐ Information Paper: *Teenagers and the Labour Market* (6268.0)
  Explains the concepts of teenage unemployment and outlines the difference between an unemployment rate and an unemployment to population ratio. Also explains the independence of teenagers' labour market activity and their involvement in full-time education.

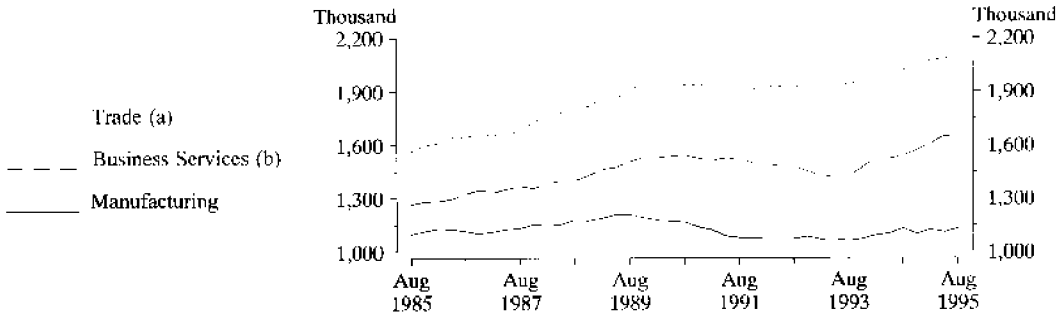
- ☐ *Labour Force Projections, Australia* (6260.0)
  Projections of the labour force and labour force participation rates for Australia. Projections by sex for eight age groups for each year to 2011. Includes detailed notes on methodology used.

2.6.2 Employed Persons by Industry

Comment

From August 1985 to August 1995, in seasonally adjusted terms, employment in Trade and Business Services grew substantially with average annual growth rates of 3.0% and 2.6% respectively. In contrast, over this period, employment in Manufacturing either declined or remained static with an average annual growth rate of 0.3%.

EMPLOYED PERSONS BY SELECTED INDUSTRIES, SEASONALLY ADJUSTED



Source: ABS 6203.0, Quarterly data

EMPLOYED PERSONS BY SELECTED INDUSTRY ('000)

Period	*Agriculture, forestry, and fishing*	*Mining*	*Manufacturing*	*Trade (a)*	*Business services (b)*	*Community services (c)*
ANNUAL AVERAGE – SEASONALLY ADJUSTED						
1989–90	429.1	103.9	1,189.3	1,942.5	1,525.1	1,055.2
1990–91	435.6	95.0	1,131.2	1,933.7	1,525.7	1,078.3
1991–92	408.9	89.6	1,074.0	1,925.2	1,495.5	1,124.2
1992–93	404.9	86.8	1,073.9	1,931.4	1,444.2	1,115.4
1993–94	409.4	89.4	1,082.0	1,974.9	1,485.2	1,141.7
1994–95	404.6	86.1	1,115.5	2,058.2	1,591.5	1,212.9
QUARTERLY – SEASONALLY ADJUSTED						
1993–94—						
February	403.5	86.4	1,091.6	1,979.1	1,519.8	1,151.9
May	408.3	87.6	1,103.2	2,008.0	1,521.0	1,161.4
1994–95—						
August	407.8	86.5	1,131.0	2,021.8	1,537.9	1,173.8
November	395.2	84.6	1,098.0	2,049.9	1,568.6	1,210.0
February	415.4	85.0	1,124.5	2,073.9	1,607.0	1,236.3
May	399.8	88.2	1,108.4	2,087.2	1,652.3	1,231.4
1995–96						
August	408.5	84.6	1,129.2	2,093.3	1,642.3	1,245.5

(a) Trade includes Wholesale Trade, Retail Trade and Accommodation, Cafes and Restaurants (b) Business Services includes Transport and Storage, Communication Services, Finance and Insurance and Property and Business Services (c) Community Services includes Health and Community Services, Cultural and Recreational Services and Personal and Other Services.
Source: ABS, The Labour Force, Australia (6203.0).

Explanatory Notes

Statistics are collected on the number of people employed by industry as at the mid-month of each quarter. The information is collected through the Labour Force Survey, and is used to determine trends in the labour market.

The Labour Force Survey collects information on the respondent's main job. The activity of this person's employer at the location of their main job is classified into one of the following Australian and New Zealand Standard Industrial Classification (ANZSIC) industry divisions: Agriculture, Forestry and Fishing; Mining; Manufacturing; Electricity, Gas and Water Supply; Construction; Wholesale Trade; Retail Trade; Accommodation, Cafes and Restaurants; Transport and Storage; Communication Services; Finance and Insurance; Property and Business Services; Government Administration and Defence; Education; Health and Community Services; Cultural and Recreational Services; and Personal and Other Services.

The ABS also collects information on employment and earnings from a sample of employers. That survey provides wage and salary employment statistics at industry, sector and State level. Information on employment in specific industries is also collected in certain annual or periodic censuses or surveys of those particular industries.

Statistics on employed persons by industry are used by the government to plan for changes in the labour market by industry sector.

Further Reading

- ☐ *Labour Statistics, Australia* (6101.0)
  Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

- ☐ *The Labour Force, Australia* (6203.0)
  Contains estimates of the civilian population aged 15 years and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

- ☐ *Employed Wage and Salary Earners, Australia* (6248.0)
  Contains estimates of employees by sex, full-time/part-time, industry and sector. Estimates of gross earnings classified by industry and sector are also shown. Estimates are available for Australia, States and Territories.

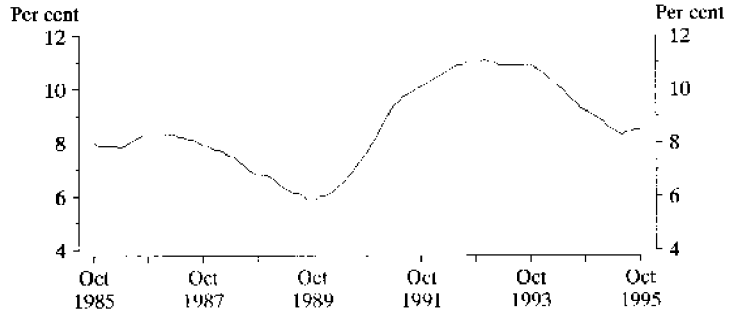
- ☐ Information Paper: *Measuring Employment and Unemployment* (6279.0)
  Provides information about the monthly Labour Force Survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

2.6.3 Unemployment

Comment

Trend estimates of the unemployment rate increased from 5.9% in November 1989 to 10.0% in September 1991 and remained at double-digit levels for over two and a half years. The trend estimate of the unemployment rate peaked at 11.1% in December 1992 and then decreased over the next two and a half years to 8.3% in June 1995. Since then, the unemployment rate increased, reaching 8.5% in October 1995.

UNEMPLOYMENT RATE, PERSONS, TREND



Source: ABS 6203.0, Monthly data

LABOUR FORCE STATUS OF CIVILIAN POPULATION: PERSONS

Period	*Unemployed ('000)*	*Employed ('000)*	*Labour force ('000)*	*Civilian population aged 15– years ('000) (a)*	*Unemployment rate (%)*	*Participation rate (%)*
			ANNUAL AVERAGE — TREND			
1989–90	513.9	7,833.8	8,347.8	13,139.9	6.2	63.5
1990–91	707.6	7,780.4	8,488.0	13,343.4	8.3	63.6
1991–92	881.0	7,641.5	8,522.6	13,527.6	10.3	63.0
1992–93	940.3	7,631.3	8,571.6	13,691.0	11.0	62.6
1993–94	916.0	7,783.5	8,699.5	13,853.5	10.5	62.8
1994–95	795.0	8,091.5	8,886.5	14,031.1	8.9	63.3
			MONTHLY — TREND			
1994–95–						
August	832.9	7,959.7	8,792.6	13,959.5	9.5	63.0
September	822.1	7,986.2	8,808.4	13,974.6	9.3	63.0
October	813.7	8,010.9	8,824.6	13,989.4	9.2	63.1
November	806.6	8,036.9	8,843.5	14,004.2	9.1	63.1
December	800.0	8,066.3	8,866.2	14,019.1	9.0	63.2
January	792.8	8,100.0	8,892.8	14,036.5	8.9	63.4
February	783.9	8,136.8	8,920.7	14,053.9	8.8	63.5
March	773.9	8,173.7	8,947.6	14,071.4	8.6	63.6
April	763.3	8,208.8	8,972.1	14,089.1	8.5	63.7
May	754.5	8,235.4	8,989.8	14,106.7	8.4	63.7
June	750.7	8,251.8	9,002.4	14,124.5	8.3	63.7
1995–96—						
July	752.5	8,260.3	9,012.7	14,140.5	8.3	63.7
August	758.4	8,265.7	9,024.1	14,156.5	8.4	63.7
September	765.6	8,271.0	9,036.6	14,172.5	8.5	63.8
October	773.3	8,276.6	9,049.9	14,189.1	8.5	63.8

(a) Series is not trend. Original data provided.
Source: ABS, The Labour Force, Australia (6203.0).

Explanatory Notes

Unemployment exists when people without a job are looking for work but unable to find employment. Once a month the Australian Bureau of Statistics conducts a Labour Force Survey in order to monitor the numbers of the employed, the unemployed and those not in the labour force. The labour force is made up of the civilian population aged 15 years or over who are already working and people who do not have a job but are actively looking for work and are available to start work.

The individuals in the labour force who are not employed, but who are actively looking for work and are available to start work, are defined by the ABS as unemployed. The ABS follows international definitions. Actively looking for work includes writing, telephoning or applying in person to an employer or registering with the Commonwealth Employment Service. However, whether a person is unemployed or not is measured by the ABS independently of whether he or she is receiving a Jobsearch, Newstart or Youth Training allowance from the Department of Social Security or is registered with the Commonwealth Employment Service.

The unemployment rate is the percentage of the labour force that is unemployed. Individuals who cease to actively look for work are defined as not in the labour force. The participation rate for any group is the labour force expressed as a percentage of the civilian population aged 15 and over in the same group. It measures the number of people who are participating in the labour force by either working or looking for work.

Statistics on unemployment are used by governments, businesses, industrial tribunals, the media, academics and other research workers to provide a better understanding of the current economic situation when formulating policy.

Further Reading

- ☐ *Australian Economic Indicators* (1350.0)
  See the feature article in the November 1995 issue on *Measuring Teenage Unemployment.*

- ☐ *Labour Statistics, Australia* (6101.0)
  Presents a wide range of information, including time series statistics, on the Australian labour market, both in tabular and graphical form.

- ☐ *The Labour Force, Australia* (6203.0)
  Contains estimates of the civilian population aged 15 and over by sex, labour force status, age, marital status, States and Territories, capital cities, school and tertiary education, industry, occupation, full-time/part-time employed.

- ☐ *Australia's Long Term Unemployed — A Statistical Profile* (6255.0)
  Contains a profile of long-term unemployed and also an international comparison.

- ☐ Information Paper: *Measuring Employment and Unemployment* (6279.0)
  Provides information about the monthly labour force survey and discusses the Australian labour force framework including reference to the measurement of unemployment and underemployment.

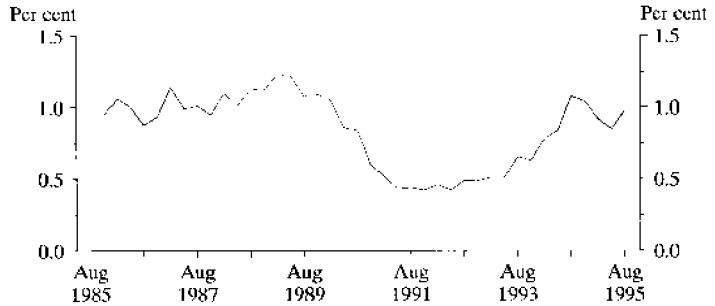
- ☐ *The Australian Labour Market* (6284.0)
  Provides the reader with an appreciation of labour issues in an easy to read feature format.

2.6.4 Job Vacancies

Comment

Gradual growth in the job vacancy rate was recorded from August 1985 to February 1989, with the rate increasing from 0.95 to a peak of 1.23 over that period. This was followed by a sharp decline in the job vacancy rate, falling to 0.42 in November quarter 1991. It then recovered to 1.08 in August quarter 1994 but subsequently declined to 0.85 in May quarter 1995.

JOB VACANCY RATE



Source: ABS 6354.0, Quarterly data

JOB VACANCIES

Period	*Manufacturing (a) ('000)*	*All industries ('000)*	*Job vacancies per '000 unemployed (No.)*	*Job vacancy rate (a) (%)*
		ANNUAL AVERAGE		
1989–90	11.3	59.5	118.0	1.02
1990–91	5.0	34.1	51.0	0.60
1991–92	3.1	25.6	29.3	0.43
1992–93	3.5	29.3	31.3	0.50
1993–94	5.4	43.1	47.3	0.73
1994–95	9.9	61.4	77.1	0.97
		QUARTERLY — TREND UNLESS FOOTNOTED		
1993–94—				
February	6.3	46.0	50.6	0.78
May	6.5	55.0	63.1	0.84
1994–95				
August	12.7	61.8	74.2	1.08
November	10.8	63.2	78.4	1.04
February	10.0	60.8	77.6	0.92
May	5.9	58.1	76.7	0.85
1995–96—				
August	8.5	56.9	76.4	0.98

(a) Trend data not available, original data provided.
Source: ABS, Job Vacancies and Overtime, Australia (6354.0).

Explanatory Notes

One measure of the demand for labour is the number of job vacancies. When the demand for labour is low, the number of job vacancies is reduced. If the demand for labour is high, the number of job vacancies increases.

The demand for labour is an indicator of changes in the level of economic activity. Recessions are characterised by a low level of job vacancies, while periods of economic growth tend to be characterised by an increase in job vacancies.

A job vacancy is a job available for immediate filling on the survey reference date and for which recruitment action has been taken. Recruitment action includes efforts to fill vacancies by advertising, factory notices, notifying public or private employment agencies, notifying trade unions and by contacting, interviewing or selecting applicants already registered with the enterprise or organisation. Excluded are jobs available only to persons employed by the enterprise or organisation, e.g. the Australian Public Service and the Public Services of each of the States and Territories.

The job vacancy rate is calculated by expressing the number of job vacancies as a percentage of employees plus vacancies. The government, unions and private bodies monitor the job vacancy rates in order to get an indication of the level of future employment. A rise in job vacancies is usually followed by an increase in employment.

Job vacancy statistics are collected by sector (public and private), industry, State or Territory and as a national total. Industry statistics are used to identify the industries experiencing growth or decline. State and Territory statistics show employment prospects and the prospect of economic growth for each of the States or Territories by public and private sectors.

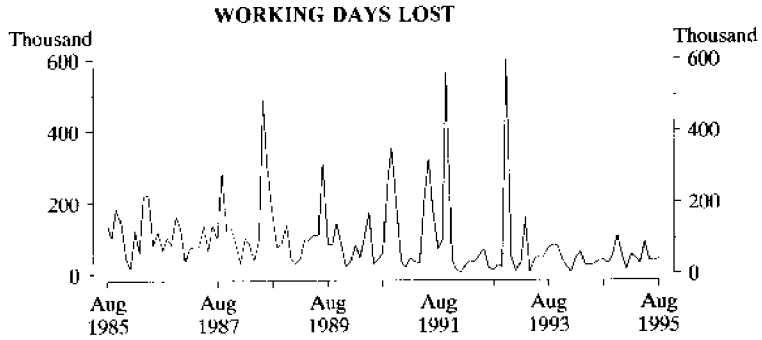
Further Reading

- ☐ *Job Vacancies and Overtime, Australia* (6354.0)
  Contains quarterly estimates of the number of job vacancies and job vacancy rates by sector, industry and State and Territory.

2.6.5 Industrial Disputes

Comment

Working days lost due to industrial disputes have generally declined in the mid 1990s when compared with the late 1980s and early 1990s. Working days lost in 1994 95 totalled 579,000; this compares with the 1990–91 figure of 1,574,000. A large number of working days lost was recorded in June 1988, October 1991 and November 1992.



Source: ABS 6321.0, Monthly data

INDUSTRIAL DISPUTES IN PROGRESS: AUSTRALIA

Period	*Number of disputes (a)*	*Employees involved ('000)*	*Working days lost ('000)*	*Working days lost per '000 employees (b)*
		ANNUAL		
1989–90	1,245	777	1,182	185
1990–91	1,201	856	1,574	238
1991–92	884	1,036	1,170	182
1992–93	643	999	1,016	159
1993–94	542	316	531	82
1994–95	647	345	579	86
		MONTHLY		
1993–94—				
June	49	8	28	82
1994–95—				
July	57	16	36	80
August	62	27	39	74
September	46	26	29	66
October	67	26	49	61
November	64	71	107	71
December	58	38	52	76
January	38	11	13	76
February	68	45	53	77
March	86	30	45	75
April	47	20	29	74
May	67	56	89	84
June	71	30	39	86
1995–96—				
July	68	14	36	85
August	66	37	43	86

(a) Prior to September 1991, disputes affecting more than one industry were counted as a separate dispute in each industry/state and in the Australian total. (b) The basis for the calculation of working days lost per thousand employees was changed in January 1995 to use estimates taken from the ABS Labour Force survey only. Estimates have been recalculated on this basis for each 12-monthly period back to December 1990.
Source: ABS, Industrial Disputes, Australia (6321.0).

Explanatory Notes

An *industrial dispute* is defined as a withdrawal from work by a group of employees, or a refusal by an employer or a number of employers to permit some or all of their employees to work, each withdrawal or refusal being made in order to enforce a demand, to resist a demand, or to express a grievance.

The statistics relate to disputes which involved stoppages of work of ten working days or more at the establishments where the stoppages occurred. Ten working days is equivalent to the amount of ordinary time worked by ten people in one day, regardless of the length of the stoppage, for example, 3,000 workers on strike for 2 hours would be counted as 750 working days lost (assuming they work an 8-hour day).

Statistics on industrial disputes are used by government departments, industrial relations authorities, employer organisations, employee unions, etc. as broad indicators of the level of industrial disputation.

Further Reading

- *Labour Force, Australia, May 1995* (6203.0)
  Contains detailed results of the monthly Labour Force Survey. The May 1995 issue provides annual statistics of industrial disputes which occurred during a particular year and disputes which ended during the year.

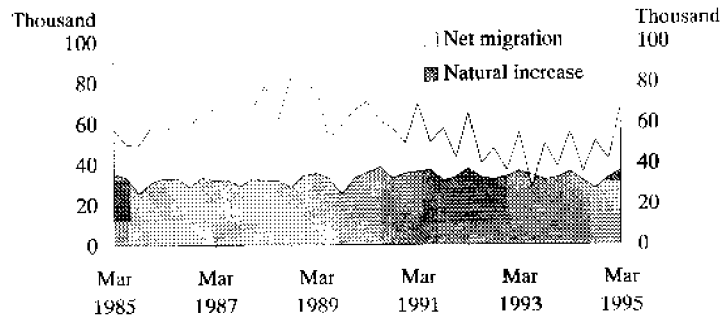
- *Industrial Disputes, Australia, 1994* (6322.0.40.001)
  Details of number of disputes, employees involved, working days lost and working days lost per thousand employees in disputes involving stoppages of work of ten working days or more, classified by State, industry, duration of disputes, cause and method of settlement.

2.6.6 Population

Comment

Australia's population has grown at an average annual rate of growth of 1.4% from March quarter 1985 to March quarter 1995. Over the same period, the highest rate of annual increase (1.7%) was recorded from 1987–88 to 1988–89. During this period, net migration contributed more to Australia's population growth than natural increase but since then, natural increase has been the greater contributor to population growth. In June quarter 1993 net migration was negative.

COMPONENTS OF POPULATION CHANGE



Source: ABS 3101.0, Quarterly data

ESTIMATED RESIDENT POPULATION AND COMPONENTS OF POPULATION CHANGE (a)
('000)

Period	*Natural increase*	*Net immigration*	*Total increase*	*Total population at end of period*
		ANNUAL		
1988–89	131.4	157.4	282.2	16,814.4
1989–90	132.4	124.7	250.7	17,065.1
1990–91	141.6	86.4	218.9	17,284.0
1991–92	136.0	69.0	205.0	17,489.1
1992–93	136.9	30.5	167.4	17,656.4
1993–94	133.3	46.8	182.0	17,838.4
		QUARTERLY		
1993 94—				
September	32.1	17.9	51.9	17,708.3
December	33.3	5.0	38.3	17,746.6
March	36.2	19.5	55.7	17,802.3
June	31.7	4.4	36.1	17,838.4
1994–95—				
September	27.8	23.5	51.3	17,889.7
December	33.3	8.8	42.1	17,931.8
March	36.7	32.0	68.7	18,000.5

(a) Usual residence basis.
Source: ABS, Australian Demographic Statistics (3101.0).

Explanatory Notes

Population is defined as the total number of people who reside in Australia. The ABS bases its estimates of the population of Australia on the Census of Population and Housing. Adjustments are made for census undercount, overseas visitors are excluded and Australian residents temporarily overseas on census night are added. Estimates of the population are updated quarterly using a range of data including migration levels, births, deaths and other indicators of population change.

The population varies as a result of natural increase and net migration. Natural increase is the number of births less the number of deaths. Net migration is the number of permanent and long-term movements to Australia, less the number of permanent and long-term movements out of Australia.

Population estimates have wide application in both government and private enterprise. There are few government programs, for example, which do not use population data in their work. Population estimates are used by the Government to determine the number of seats allocated to each State in the House of Representatives, to allocate Commonwealth funds to each State and local government authority, to plan requirements for hospitals, schools, transport, housing development and other infrastructure, to formulate migration policy and for many other purposes.

Further Reading

- *Australian Demographic Statistics* (3101.0)
  Contains quarterly estimates of total population by States, Territories and Australia. Included are the most recent estimates of population in 5-year age groups. Details of the components of population change, vital statistics and migration are also included.

- *Estimated Resident Population by Sex and Age: States and Territories of Australia* (3201.0)
  Contains annual estimates of population for each State and Territory classified by sex and single years of age (0 to 84); also grouped ages, sex ratios, median and mean ages of the population; age-sex pyramid for Australia.

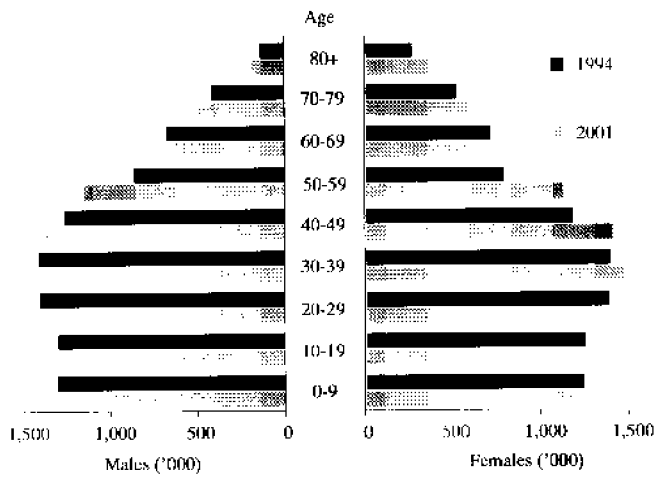
- *Projections of the Populations of Australia, States and Territories* (3222.0)
  The latest edition provides four alternative projections of the resident population by selected ages and sex by State and Territory for each year to 1996 and from 2001 at 5-yearly intervals to 2041.

2.6.7 Demography

Comment

The Australian population is continuing to assume an older age profile. As at 30 June 1994 the number of persons aged 60 years or more was 2.8 million or 15.8% of the total population. This figure is projected to increase to 3.2 million or 16.4% of the total population in the year 2001. The proportion of children aged 0–9 years is projected to decrease from 14.4% of the total population at 30 June 1994 to 13.9% in the year 2001.

AUSTRALIAN POPULATION: AGE AND SEX DISTRIBUTION 1994 AND 2001



Sources: ABS 3201.0, Annual data and 3222.0, Annual data

DEMOGRAPHY

Period	*Net reproduction rate*	*Life expectancy at birth males*	*Life expectancy at birth females*	*Infant mortality rate*	*Crude marriage rate*	*Net overseas migration (a)*
			ANNUAL			
1989	0.88	73.32	79.60	8.0	7.0	157,436
1990	0.91	73.87	80.06	8.2	6.9	124,647
1991	0.89	74.40	80.39	7.1	6.6	86,432
1992	0.91	74.46	80.40	7.0	6.6	68,996
1993	0.90	74.99	80.86	6.1	6.4	30,458
1994	0.88	75.04	80.94	5.8	6.2	46,762

(a) Year ended 30 June.
Sources: ABS. Australian Demographic Statistics (3101.0). Births, Australia (3301.0), Deaths, Australia (3302.0) and Marriages, Australia (3306.0).

Explanatory Notes

Demographic data assist researchers in studying the characteristics of the population. Examining these types of data over a period of time helps researchers and policy makers to understand the changing characteristics of the population.

An indication of the extent to which the population reproduces itself can be gauged from the net reproduction rate. This rate measures the average number of daughters that a woman would bear if prevailing birth rates and death rates were to remain unchanged throughout her reproductive years. A net reproduction rate of 0.91 indicates the population is about 9% below replacement level.

Life expectancy at birth indicates how long a new born baby can be expected to live. Life expectancy is often used to indicate changes in the health status of a community or to make comparisons between communities.

Infant mortality measures the number of deaths of babies who are less than 1 year old in a given period, usually a year, per thousand live births during the same period.

The crude marriage rate measures the number of marriages registered during a calendar year per thousand of the mid-year population for the calendar year. The crude marriage rate includes first marriages and remarriages.

One of the most important factors in Australia's economic and social development has been the contribution made by overseas born Australians.

Net overseas migration, i.e. the difference between permanent and long-term arrivals and departures and the natural increase in the population (excess of births over deaths) are the two components of Australia's population change.

Further Reading

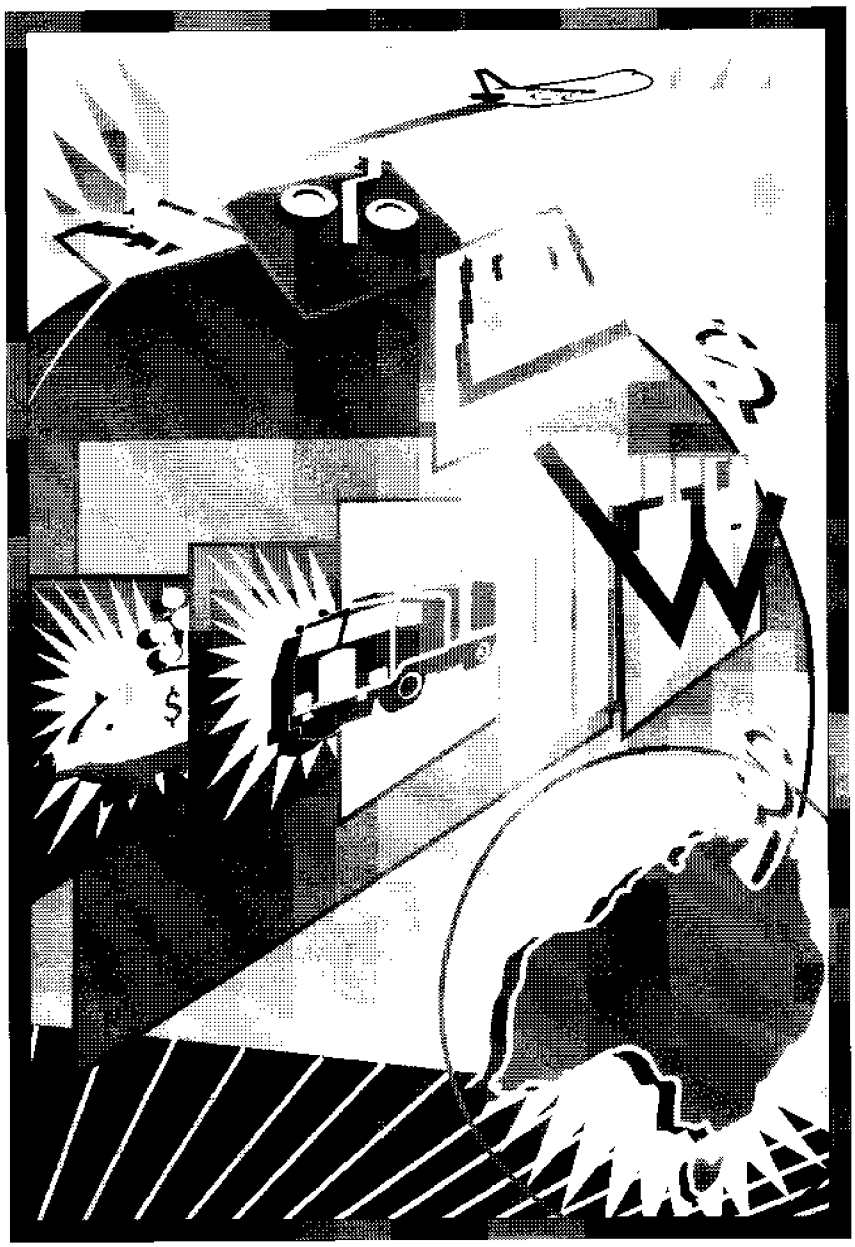
- ☐ *Australian Demographic Statistics* (3101.0)
  Contains quarterly estimates of the population by States, Territories and Australia. Details of the components of population change, vital statistics and migration are also included.

- ☐ *Births, Australia* (3301.0)
  Contains annual data on births by State, Territory and Australia, characteristics of the parent(s) and also shows crude and age-specific birth rates and reproduction rates.

- ☐ *Deaths, Australia* (3302.0)
  Contains annual data on the number of deaths by State, Territory and Australia. Deaths are classified by age, sex, birthplace, marital status, occupation and cause of death. Also information on deaths of indigenous people.

- ☐ *Causes of Death, Australia* (3303.0)
  Contains annual data on the causes of death by selected age groups.

- ☐ *Marriages and Divorces, Australia* (3310.0)
  Presents details of marriages and divorces and includes estimates of the population by marital status.



Section 2.7
Financial Markets

Explanatory Notes

Housing purchases are most commonly financed by a loan from a financial institution. Housing finance statistics measure the supply of finance only, not the demand for housing finance. The supply is, however, influenced by both the availability of and the demand for housing finance. The demand for housing loans is dependent on people's perceived ability to repay the loan. The ability to repay the loan is affected by interest rates, the price of the house, the applicant's income level and the risk of losing their source of income.

Prior to April 1986, the Federal Government regulated the housing loan interest rate. Banks were given a maximum interest rate which they were allowed to charge borrowers. The Government was aiming to make housing more affordable. Since 1986, banks have been allowed to determine the interest rate levels for housing loans.

The Government still has an influence over the interest rate through its monetary policy stance. When monetary policy is tight, interest rates are high. The cost of housing, financed by borrowing, increases. When monetary policy is loosened, interest rates fall. The cost of housing, financed by borrowing, declines.

Further Reading

- ☐ *Australian Economic Indicators* (1350.0)
  See feature articles in the December 1991 issue on *Building Approvals and Housing Finance Statistics – Do they Tell the Same Story* and in the March 1994 issue on *Impact of Refinancing on Housing Finance Statistics*

- ☐ *Housing Finance for Owner Occupation, Australia* (5609.0)
  Presents data on secured finance commitments to individuals for construction of dwellings, purchase of new and established dwellings by banks, permanent building societies and other lenders.

Explanatory Notes

There are a number of ways in which the supply of money can be measured. Financial aggregates have long been used by central banks as indicators of the effects of monetary policy. Aggregates used in Australia are currency, M1, M3, Broad Money and Credit. The most commonly referred to are M3 and Broad Money.

The first four of these are monetary aggregates and refer mainly to liabilities of the finance sector while credit is a measure based on financial intermediaries' assets. Definitions are as follows:

Currency is defined as notes and coins on issue less holdings of notes and coins by all banks and the Reserve Bank.

M1 is defined as currency plus current deposits with banks.

M3 is defined as M1 plus other deposits of the private non-bank sector.

Broad Money is defined as M3 plus borrowings from the private sector by non-bank financial intermediaries less holdings of currency and deposits of NBFIs.

Credit is defined as loans, advances and bills discounted to the private sector (it does not include loans to other financial intermediaries).

Currency has become less significant with the increasing use of credit cards.

Between 1976 and 1985 projections for M3 growth were established by the authorities in order to determine the stance of monetary policy. Relationships between money and credit, economic growth and inflation are complex, however, and in the period following deregulation of the financial system, these relationships appear to have broken down. Because of this, policies targeting a monetary aggregate are no longer pursued, though financial aggregates remain in the set of indicators used in setting and assessing the effects of monetary policy.

Further Reading

- ☐ *Reserve Bank of Australia Bulletin*
  Contains monthly levels of selected monetary aggregates for Australia. See also the feature articles *Recent Trends in Money and Credit* in the December 1991 issue and *The Art of Monetary Policy* in the October 1994 issue.

- ☐ *Financial Aggregates*
  Monthly Reserve Bank of Australia press release containing Australia's financial aggregates.

- ☐ *Australian National Accounts: Financial Accounts* (5232.0)
  Shows the level (stock) of financial assets and liabilities of each sector of the economy; the market for each of the conventional financial instruments; and inter-sectoral transactions in financial assets and liabilities.

Explanatory Notes

Share price indexes provide an indication of aggregate price movements for listed shares on the Australian Stock Exchange (ASX).

The most quoted index is the all ordinaries share price index. The all ordinaries is calculated from a sample of shares which include those of 322 companies which account for 92% of listed Australian/PNG equities by aggregate market value.

The all ordinaries sample is reviewed each month and is chosen mainly on the basis of the market value of the company and how often the shares are traded.

Another important index is the all resources index which measures the movement in share prices for leading mining and oil companies. The Australian Stock Exchange also produces 24 sub-indexes for specific sectors within the share market. These measure the rise and fall in the Aggregate Market Value (AMV) of shares included in the sub-index. Some industries (e.g. car manufacturers) have no publicly listed shares in Australia, so no share indexes can be produced for these industries.

Share price indexes only measure the capital gain or loss experienced by shareholders through fluctuations in share prices and do not take into account dividends earned. Share prices reflect business confidence in general, as well as in specific industries. A set of 39 accumulation indexes is also calculated by the Australian Stock Exchange. These are intended to indicate the total pre-tax returns (after reinvesting dividends) from investments in listed shares.

Further Reading

- ☐ *Companies on the Australian Stock Exchange Indices*
  Presents a detailed explanation of the indexes produced by the Australian Stock Exchange and lists the index portfolio at the time of the publication (updated quarterly).

- ☐ *Monthly Index Analysis*
  Contains monthly records of all Australian share price and accumulation index movements, including sample changes, index weights comparisons with international indexes, currency adjusted indexes and exchange rates.

- ☐ *Australian Stock Exchange Indices and Yields Book*
  Contains tabulations of historical data covering all ASX share price and Accumulation Indexes monthly from 1979 to 1994. It also provides longer monthly tabulations back as far as 1875 for selected indexes.

Explanatory Notes

Interest is the compensation paid to a lender for deferring expenditure and the price paid by a borrower for the use of the funds saved by the lender.

There are different rates of interest which vary according to factors such as the amount borrowed, the period of the loan and the credit rating of the borrower. As a guide to the level of long-term interest rates, the yield (i.e. the equivalent of the interest rate) on a 10-year Treasury bond is shown. The cash rate, prime rate and 90-day bank bill yield are examples of short-term interest rates.

The cash rate measures the amount of interest paid on overnight or one-day loans. The short-term money market is where banks and other large corporations lend funds that are temporarily in surplus to other financial institutions, etc. which have a temporary shortfall.

The Reserve Bank of Australia operates in the short-term money market in order to influence the cash rate (by borrowing and lending funds itself). In turn, changes in the level of the cash rate affect other interest rates.

Interest rates on short-term investments, e.g. 90-day bank bills, are very closely related to the cash rate. Ultimately, interest rates on bank deposits and funds placed with building societies, credit unions and the like are also related to the cash rate to varying degrees. Changes in the cost of borrowing by intermediaries flow through to their loan rates. For example, the prime rate, which indicates the amount of interest charged by banks on loans to preferred customers, tends to move at an equal pace with the cash rate.

These interrelationships allow the Reserve Bank, through its operations in the short-term money market, to have an effect on many interest rates in the economy. This means that the Bank can influence the cost and hence the amount of borrowing and lending in the economy, with the aim of maintaining low inflation and contributing to a policy mix to achieve strong economic growth.

Further Reading

- ☐ *Reserve Bank of Australia Bulletin*
  Contains information on interest rates for the money market, capital market, banks and other financial institutions.

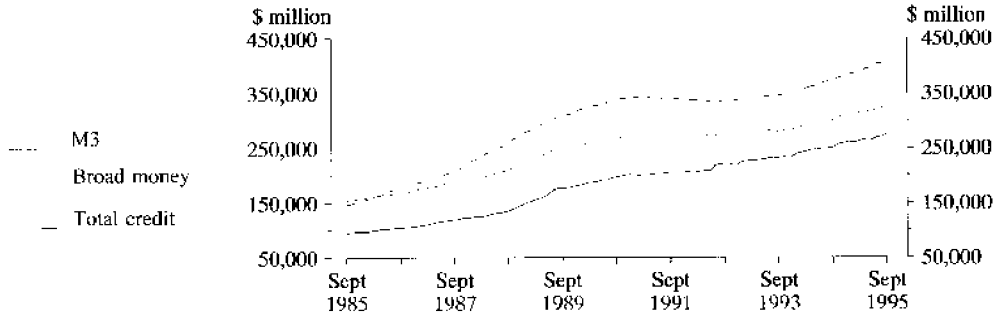
- ☐ *Monthly Statistics for Corporations Registered under the Financial Corporations Act* (5647.0)
  Contains monthly statistics, including interest rates, for all financial corporations registered under the Financial Corporations Act.

2.7.1 M3, Broad Money and Credit

Comment

Over the period from 1985 to 1995 the amount of money in circulation in the Australian economy, as measured by the broad money supply, has risen from $145,662m in September 1985 to $411,936m in September 1995. Money supply grew rapidly from 1988 to 1990 after which growth slowed before accelerating again in late 1993.

M3, BROAD MONEY AND CREDIT, SEASONALLY ADJUSTED



Source: Reserve Bank of Australia Bulletin, Monthly data

SELECTED FINANCIAL AGGREGATES
($ million)

Period	*M3 (a)*	*Broad money (b)*	*Total credit (c)*
	ANNUAL		
1989–90	190,410	261,917	332,932
1990–91	202,650	266,402	340,796
1991–92	208,523	270,167	335,858
1992–93	229,612	279,313	343,059
1993–94	246,237	295,838	366,333
1994–95	263,777	316,783	400,018
	MONTHLY — SEASONALLY ADJUSTED		
1994–95—			
July	248,955	299,716	369,723
August	249,933	300,288	372,441
September	250,432	301,109	373,894
October	254,753	305,680	377,860
November	258,093	309,036	380,994
December	258,912	310,232	383,655
January	259,212	311,063	385,564
February	260,171	312,735	388,202
March	262,301	314,684	390,736
April	264,237	316,224	393,506
May	265,302	318,242	396,990
June	264,505	318,133	399,921
1995–96			
July	268,949	322,006	403,544
August	270,278	323,063	405,935
September	274,407	327,130	411,936

(a) Currency plus current deposits with banks plus other deposits of the private non-bank sector. (b) M3 plus borrowings from the private sector by non-bank financial intermediaries less holdings of currency and deposits of NBFIs. (c) Credit is defined as loans, advances and bills discounted to the private sector (it does not include loans to other financial intermediaries).
Source: Reserve Bank of Australia Bulletin.

Explanatory Notes

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The most quoted index is the all ordinaries share price index. The all ordinaries is calculated from a sample of shares which include those of 322 companies which account for 92% of listed Australian/PNG equities by aggregate market value.

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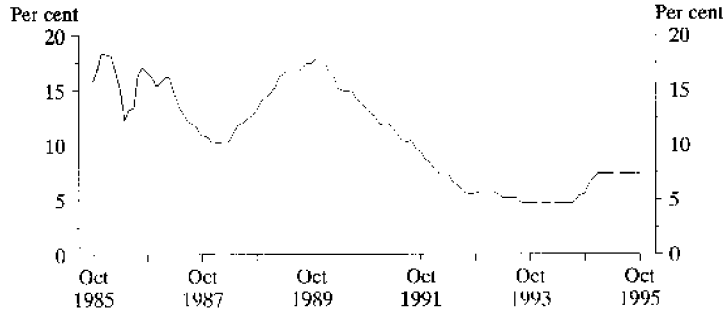
- ☐ *Australian Stock Exchange Indices and Yields Book*
  Contains tabulations of historical data covering all ASX share price and Accumulation Indexes monthly from 1979 to 1994. It also provides longer monthly tabulations back as far as 1875 for selected indexes.

2.7.2 Interest Rates

Comment

The private official cash rate fluctuated significantly between October 1985 and February 1987 before falling to 10.23% in January 1988. In November 1989 the official cash rate peaked at 17.94% before experiencing a sustained decline to 4.65% in July 1994. The official cash rate then increased to 7.43% in January 1995 and has since remained stable.

PRIVATE OFFICIAL CASH RATE (a)



(a) Authorised dealers: weighted average rate. Data are the weighted average of the month.
Source: Reserve Bank of Australia Bulletin, Monthly data

KEY INTEREST RATES (a)
(per cent)

Period	*Private official cash rate (b)*	*Private prime rate*	*Private 90-day bank bills (c)*	*Commonwealth government 10-year Treasury bonds*
		ANNUAL		
1989 90	16.69	19.90	16.85	13.31
1990 91	12.55	16.02	12.21	12.11
1991 92	8.35	12.63	8.08	9.87
1992 93	5.56	9.98	5.64	8.35
1993 94	4.74	9.04	4.89	7.39
1994 95	6.55	10.21	7.25	9.85
		MONTHLY		
1994–95				
August	5.00	9.00	5.70	9.35
September	5.44	9.75	6.10	10.35
October	5.52	9.75	6.55	10.50
November	6.43	9.80	7.30	10.45
December	6.95	10.75	8.15	10.05
January	7.43	10.75	8.45	10.40
February	7.43	10.75	8.15	9.85
March	7.44	10.75	8.10	9.85
April	7.44	10.75	8.00	9.70
May	7.45	10.75	7.60	8.95
June	7.44	10.75	7.55	9.20
1995–96—				
July	7.44	10.75	7.55	9.40
August	7.44	10.75	7.55	9.00
September	7.44	10.75	7.50	8.55
October	7.43	10.75	7.50	8.80

(a) All data are end of period unless otherwise stated. (b) Authorised dealers: weighted average rate. Data are the weighted average of the month, annuals are from the last month of the year. (c) Data are the weighted average of the last week of the period.
Source: Reserve Bank of Australia Bulletin (RBA).

Explanatory Notes

Housing purchases are most commonly financed by a loan from a financial institution. Housing finance statistics measure the supply of finance only, not the demand for housing finance. The supply is, however, influenced by both the availability of and the demand for housing finance. The demand for housing loans is dependent on people's perceived ability to repay the loan. The ability to repay the loan is affected by interest rates, the price of the house, the applicant's income level and the risk of losing their source of income.

Prior to April 1986, the Federal Government regulated the housing loan interest rate. Banks were given a maximum interest rate which they were allowed to charge borrowers. The Government was aiming to make housing more affordable. Since 1986, banks have been allowed to determine the interest rate levels for housing loans.

The Government still has an influence over the interest rate through its monetary policy stance. When monetary policy is tight, interest rates are high. The cost of housing, financed by borrowing, increases. When monetary policy is loosened, interest rates fall. The cost of housing, financed by borrowing, declines.

Further Reading

- *Australian Economic Indicators* (1350.0)
  See feature articles in the December 1991 issue on *Building Approvals and Housing Finance Statistics Do they Tell the Same Story* and in the March 1994 issue on *Impact of Refinancing on Housing Finance Statistics*

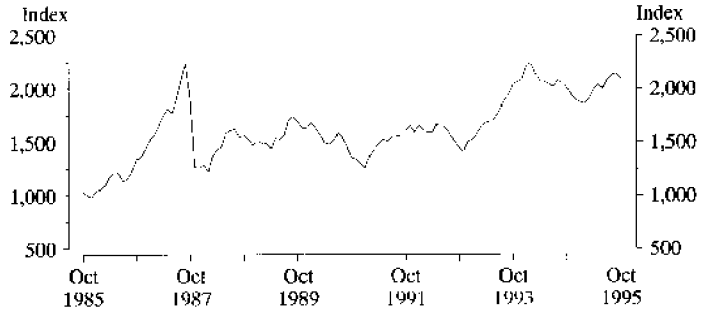
- *Housing Finance for Owner Occupation, Australia* (5609.0)
  Presents data on secured finance commitments to individuals for construction of dwellings, purchase of new and established dwellings by banks, permanent building societies and other lenders.

2.7.3 Share Price Indexes

Comment

The all ordinaries index experienced very strong rises from August 1986 to September 1987. This upward trend was brought to an abrupt halt with the stock market crash of October 1987, which resulted in an immediate fall in the all ordinaries index. From the time of the crash to November 1992, the index displayed more modest fluctuations, with a stronger upward trend from December 1992 to February 1994 and fluctuating thereafter.

ALL ORDINARIES INDEX
(31 DEC 1979 = 500.0)



Source: Australian Stock Exchange, Monthly data

SHARE PRICE INDEXES (a) (31 DEC 1979 = 500.0)

Period	*All industrials*	*All resources*	*All ordinaries*
	ANNUAL		
1989–90	2,367.9	855.3	1,508.8
1990–91	2,330.7	873.5	1,504.9
1991–92	2,550.0	965.7	1,652.7
1992–93	2,665.7	1,002.7	1,722.6
1993–94	2,984.7	1,331.1	2,040.2
1994–95	3,012.1	1,235.7	2,000.8
	MONTHLY		
1994–95—			
August	3,026.0	1,363.2	2,075.7
September	2,926.1	1,407.7	2,054.8
October	2,844.9	1,391.2	2,009.9
November	2,780.2	1,314.9	1,940.3
December	2,741.0	1,255.2	1,890.9
January	2,721.2	1,229.7	1,868.4
February	2,783.8	1,162.0	1,859.9
March	2,850.0	1,177.5	1,897.8
April	2,969.3	1,268.6	1,999.3
May	3,052.8	1,271.0	2,037.8
June	3,012.1	1,235.7	2,000.8
1995–96—			
July	3,075.9	1,344.8	2,087.4
August	3,107.9	1,392.3	2,126.9
September	3,169.3	1,370.1	2,142.6
October	3,131.7	1,310.5	2,094.4

(a) Share prices on joint trading floors. Monthly figures are average of daily figures for the month. Annual index is from the last month of the year. *Source: Monthly Index Analysis Australian Stock Index.*

CHAPTER 3
INTERNATIONAL COMPARISONS

NOTE: The statistics for Germany in these tables refer to *Western Germany* (Federal Republic of Germany before the unification of Germany), except where otherwise indicated.

Statistics relate to some of the members of the Organisation for Economic Co-operation and Development (OECD). The OECD comprises European Union members Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom plus Iceland, Norway, Switzerland, Turkey, the United States, Canada, Japan, New Zealand, Australia and Mexico. The major seven OECD countries are Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.

International Comparisons

International comparisons show the economic performance of Australia against the performance of other countries.

Some care must be taken when comparing economic indicators between countries. Statistical systems vary considerably between countries and this will affect the extent of comparability of the data.

Australian and other government statistical agencies throughout the world produce and present national accounts based on the principles contained in the United Nations *A System of National Accounts* (SNA). Although a number of other international standards have been developed for specific areas of national accounts, such as the International Monetary Fund's *Balance of Payments Manual* and *Government Finance Statistics*, the SNA has a central position in the standard setting process for economic statistics generally. However, the degree to which the system is implemented varies considerably between countries.

Further Reading

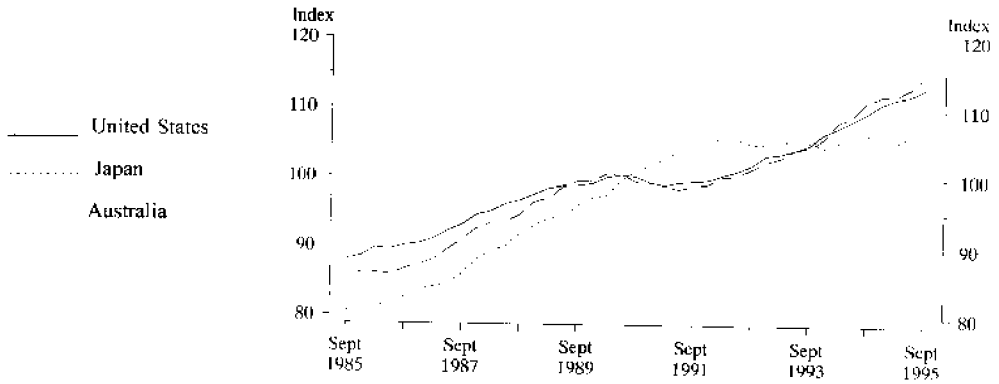
- ☐ *OECD Outlook*
  Presents data on OECD member countries, published in June and December of each year, including employment/unemployment, current account balance, inflation and GDP.

- ☐ *OECD Economic Surveys: Australia*
  Reviews trends in the Australian economy and policy conclusions. Presents a calendar of the main economic events and Australian and international statistics in a statistical annex.

- ☐ *Australian Economic Indicators* (1350.0)
  A comprehensive, monthly compendium of economic statistics including international comparisons. Generally presents statistics for the last 9 years.

3.1 Real Gross Domestic Product Volume Index

REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES
SEASONALLY ADJUSTED (1990 = 100.0)



Source: Organisation for Economic Co-operation and Development, Quarterly data

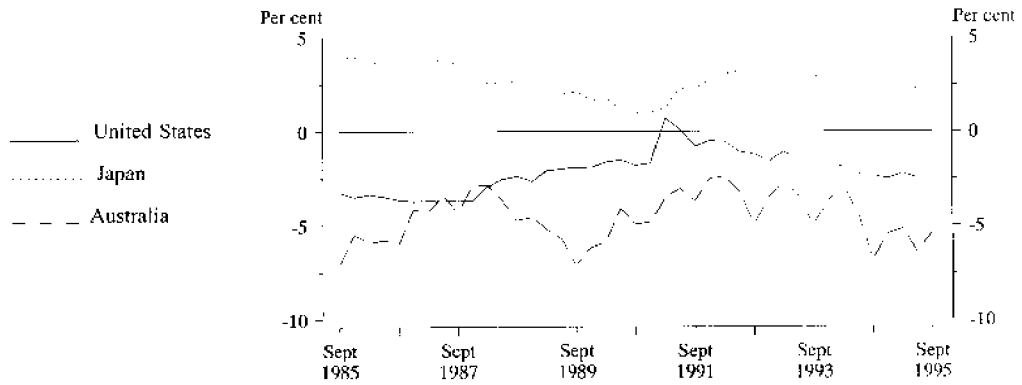
REAL GROSS DOMESTIC PRODUCT VOLUME INDEXES (a)
(1990 = 100.0)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1989–90	99.6	97.6	96.8	99.0	100.1	100.0
1990–91	99.5	102.4	103.3	100.7	98.8	99.0
1991–92	100.2	105.4	106.1	102.4	97.6	99.6
1992–93	103.3	105.2	105.1	103.7	98.3	102.7
1993–94	106.8	105.2	105.8	105.9	101.6	107.0
1994–95	111.1	105.9	n.y.a.	109.2	105.2	112.1
			QUARTERLY — SEASONALLY ADJUSTED			
1993–94—						
March	107.4	105.4	105.8	106.3	101.9	108.2
June	108.5	105.6	106.8	107.3	103.3	109.1
1994–95 –						
September	109.6	106.5	107.9	108.3	104.2	111.3
December	111.0	105.4	108.7	109.0	104.9	112.0
March	111.7	105.4	n.y.a.	109.6	105.5	112.1
June	112.1	106.2	n.y.a.	110.1	106.1	113.2
1995–96–						
September	113.2	n.y.a.	n.y.a.	n.y.a.	n.y.a.	115.0

(a) Data for the United States, Japan and Germany measure real gross national product.
Sources: Organisation for Economic Co-operation and Development (OECD) and Australian Bureau of Statistics (ABS).

3.2 Balance on Current Account

BALANCE ON CURRENT ACCOUNT AS A PERCENTAGE OF SEASONALLY ADJUSTED GDP



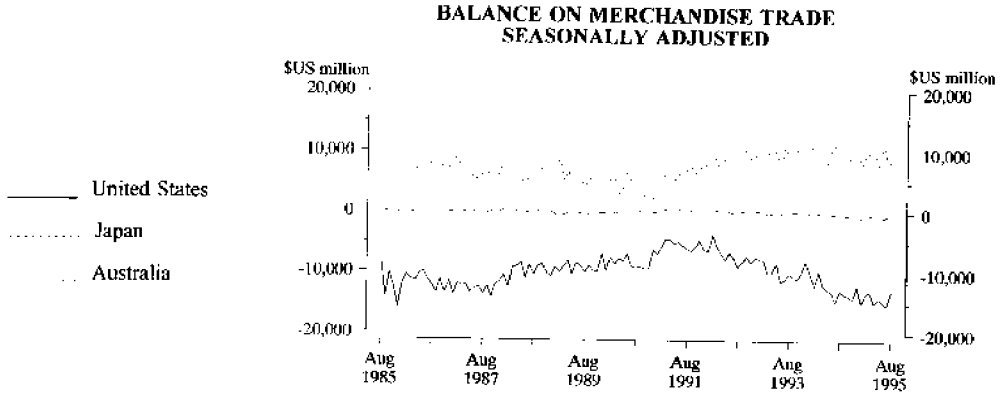
Source: Organisation for Economic Co-operation and Development, Quarterly data

BALANCE ON CURRENT ACCOUNT: PERCENTAGE OF SEASONALLY ADJUSTED GDP (a)

Period	*United States*	*Japan*	*United Kingdom*	*Australia*
		ANNUAL		
1989–90	–1.7	1.7	–4.6	–5.8
1990–91	–0.7	1.4	–2.1	–4.1
1991–92	–0.7	2.8	–1.6	–2.9
1992–93	–1.4	3.3	–1.8	–3.6
1993–94	–1.9	3.0	–1.0	–4.0
1994–95	–2.4	2.5	–0.4	–5.9
	QUARTERLY	SEASONALLY ADJUSTED		
1993–94—				
March	–1.8	3.2	–0.6	–2.9
June	–2.3	2.9	–1.4	–4.3
1994–95				
September	–2.3	2.5	0.0	–6.8
December	–2.5	2.6	0.9	–5.4
March	–2.2	2.5	0.0	–5.2
June	–2.5	2.3	–2.5	–6.4
1995–96—				
September	n.y.a.	n.y.a.	n.y.a.	–5.4

(a) Statistics are calculated as the original balance on current account as percentage of the seasonally adjusted current price gross domestic product, except for Japan where real gross national product replaces gross domestic product.
Sources: Organisation for Economic Co-operation and Development and ABS.

3.3 Balance on Merchandise Trade



Source: Organisation for Economic Co-operation and Development, Monthly data

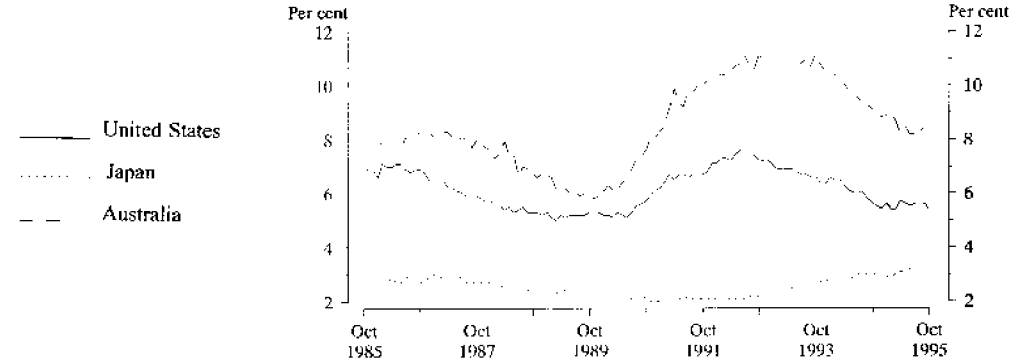
BALANCE ON MERCHANDISE TRADE (a)
($US million)

Period	*United States*	*Japan*	*Germany (b)*	*United Kingdom*	*Australia*
		ANNUAL			
1989 90	−103,029	56,755	73,250	42,316	1,562
1990 91	−84,114	58,313	29,886	30,373	2,770
1991 92	71,397	93,358	17,886	26,733	3,117
1992 93	−102,812	113,646	32,231	27,915	806
1993 94	−129,991	122,555	40,729	25,336	32
1994 95	−166,685	117,233	54,134	−20,310	5,684
		MONTHLY — SEASONALLY ADJUSTED			
1993-94—					
June	−12,977	10,754	4,972	1,603	169
1994 95—					
July	−14,776	11,428	2,737	−1,568	−234
August	−12,872	7,828	5,049	−1,169	−596
September	−13,465	9,056	3,031	−1,523	−385
October	−13,642	9,006	4,277	−1,854	−244
November	−14,202	11,147	4,809	−1,807	−244
December	−12,010	10,659	2,480	−2,873	−611
January	−14,897	7,983	6,204	−1,428	−687
February	−13,350	10,065	4,796	−1,088	−471
March	−12,887	10,060	3,768	−1,175	−272
April	−14,797	10,655	6,157	−1,989	−472
May	14,058	7,605	5,328	−1,867	−761
June	14,730	11,742	5,499	−1,970	−707
1995–96—					
July	−15,290	8,752	5,038	−2,152	−408
August	12,822	8,450	5,536	−2,349	−165

(a) All series are exports (f.o.b.) less imports (c.i.f.), except the United States and Australia where imports are also f.o.b. Data are measured on a foreign trade basis. (b) Excluding trade with the German Democratic Republic. From July 1990, data refer to Germany after unification.
Source: Organisation for Economic Co-operation and Development.

3.4 Unemployment Rates

STANDARDISED UNEMPLOYMENT RATES
SEASONALLY ADJUSTED



Source: Organisation for Economic Co-operation and Development, Monthly data

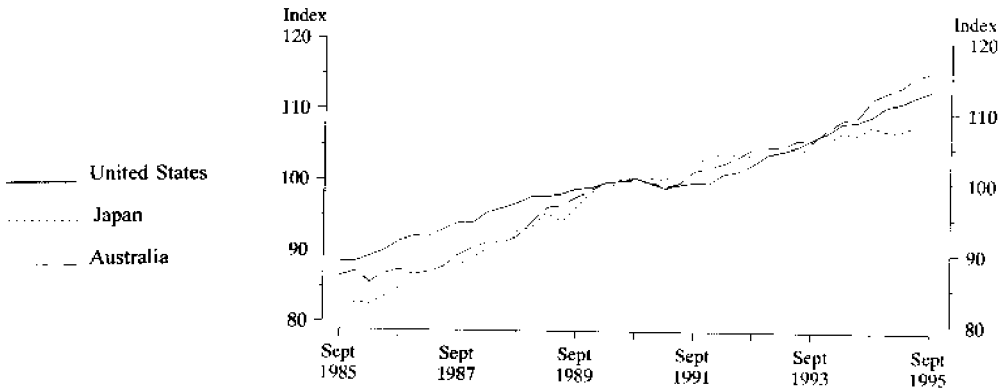
UNEMPLOYMENT RATES (a)
(per cent)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1989–90	5.1	2.2	4.9	5.4	6.7	6.6
1990–91	6.7	2.1	4.2	6.3	8.9	9.2
1991–92	7.6	2.1	4.5	7.0	9.9	10.8
1992–93	6.8	2.5	6.0	7.2	10.4	10.8
1993–94	6.0	2.9	6.9	7.0	9.7	9.8
1994–95	5.5	3.2	6.8	6.8	8.8	8.2
			MONTHLY — SEASONALLY ADJUSTED			
1994 95 –						
August	6.0	3.0	6.9	7.0	9.5	9.4
September	5.8	3.0	6.9	6.9	9.3	9.3
October	5.6	3.0	6.8	6.8	9.1	9.1
November	5.5	2.9	6.8	6.7	9.0	9.1
December	5.4	2.8	6.8	6.6	8.8	8.8
January	5.6	2.9	6.7	6.8	8.7	8.9
February	5.4	2.9	6.7	6.7	8.7	8.9
March	5.4	3.0	6.7	6.7	8.8	8.7
April	5.7	3.1	6.8	6.8	8.8	8.3
May	5.6	3.1	6.8	6.8	8.8	8.5
June	5.5	3.2	6.8	6.8	8.8	8.2
1995–96—						
July	5.6	3.2	6.8	6.8	8.8	8.2
August	5.6	3.2	n.y.a.	6.8	8.7	8.3
September	5.6	3.2	n.y.a.	6.7	8.6	8.4
October	5.4	n.y.a.	n.y.a.	n.y.a.	n.y.a.	n.y.a.

(a) All series are OECD standardised unemployment rates.
Source: Organisation for Economic Co-operation and Development.

3.5 Private Consumption Expenditure Volume Index

PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES SEASONALLY ADJUSTED (1990 = 100.0)



Source: Organisation for Economic Co-operation and Development, Quarterly data

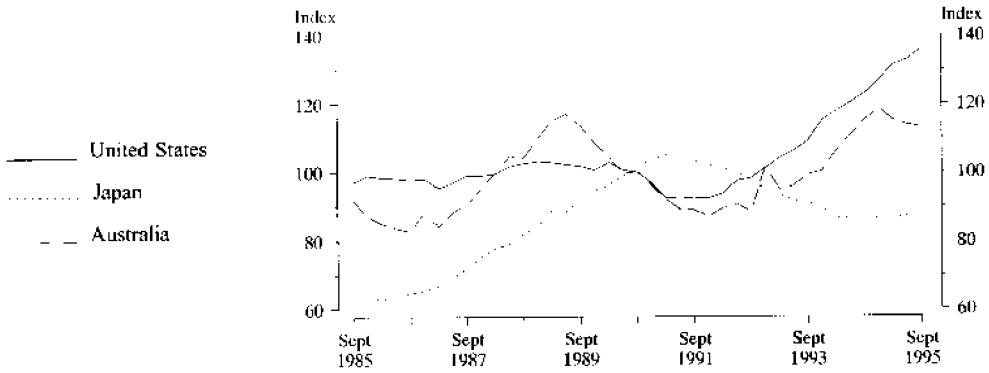
PRIVATE CONSUMPTION EXPENDITURE VOLUME INDEXES (1990 = 100.0)

Period	*United States*	*Japan*	*Germany*	*United Kingdom*	*Australia*
		ANNUAL			
1989–90	99.4	98.4	97.2	100.0	99.1
1990–91	99.7	100.8	103.3	98.9	99.8
1991–92	100.6	103.6	106.4	97.3	102.5
1992–93	104.0	104.2	108.0	98.8	105.2
1993–94	107.6	106.1	108.8	101.9	107.9
1994–95	111.0	107.7	n.y.a.	104.4	113.4
		QUARTERLY — SEASONALLY ADJUSTED			
1993–94—					
March	108.4	107.1	109.6	102.2	108.9
June	108.7	106.8	108.6	102.8	109.3
1994–95					
September	109.5	108.0	108.6	103.6	111.9
December	110.9	107.3	108.0	104.5	112.8
March	111.3	107.4	n.y.a.	104.4	113.6
June	112.3	108.3	n.y.a.	105.2	115.2
1995–96—					
September	113.1	n.y.a.	n.y.a.	n.y.a.	115.8

Source: Organisation for Economic Co-operation and Development.

3.6 Private Fixed Capital Investment Volume Index

PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEXES SEASONALLY ADJUSTED (1990 = 100.0)



Source: Organisation for Economic Co-operation and Development, Quarterly data

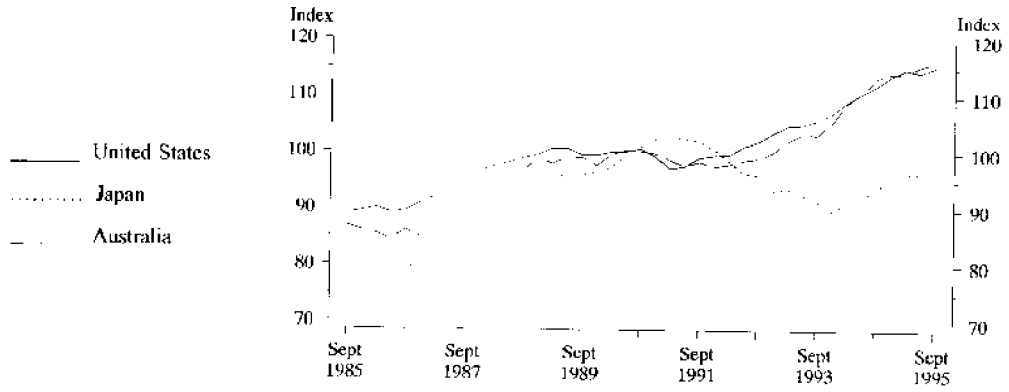
PRIVATE FIXED CAPITAL INVESTMENT VOLUME INDEXES (a) (1990 = 100.0)

Period	*United States*	*Japan*	*Germany*	*United Kingdom*	*Australia*
		ANNUAL			
1989–90	101.4	95.5	96.1	102.4	106.5
1990–91	95.4	103.5	103.3	94.6	94.3
1991–92	93.9	101.5	106.9	89.6	89.0
1992–93	102.4	94.4	100.1	89.2	95.1
1993–94	115.6	88.3	94.6	91.7	104.1
1994–95	128.5	86.8	n.y.a.	93.2	115.6
		QUARTERLY — SEASONALLY ADJUSTED			
1993–94—					
March	117.9	86.4	95.8	94.8	106.3
June	120.3	86.4	95.5	92.1	110.5
1994–95					
September	122.8	87.2	95.8	91.9	115.1
December	126.8	86.1	97.0	93.3	118.5
March	131.3	86.7	n.y.a.	93.1	115.2
June	132.9	87.2	n.y.a.	94.6	113.7
1995–96—					
September	135.8	n.y.a.	n.y.a.	n.y.a.	112.8

(a) Fixed capital investment volume indexes for Germany and the United Kingdom are for gross domestic fixed investment.
Source: Organisation for Economic Co-operation and Development and ABS.

3.7 Industrial Production Volume Index

INDUSTRIAL PRODUCTION VOLUME INDEXES
SEASONALLY ADJUSTED (1990 = 100.0)



Source: Organisation for Economic Co-operation and Development, Quarterly data

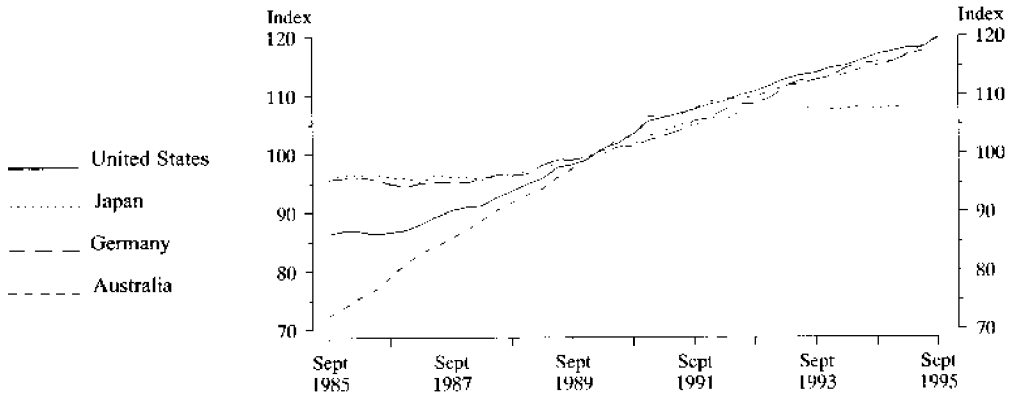
INDUSTRIAL PRODUCTION VOLUME INDEXES
(1990 = 100.0)

Period	*United States*	*Japan*	*Germany*	*OECD Major 7*	*United Kingdom*	*Australia*
			ANNUAL			
1989 90	99.8	97.3	97.4	99.1	100.8	99.2
1990 91	98.7	102.1	103.1	100.0	98.0	99.1
1991 92	99.8	99.4	103.2	99.8	95.8	98.0
1992 93	103.8	94.0	96.0	99.2	96.9	101.2
1993 94	108.2	91.2	94.5	100.6	100.5	107.0
1994 95	113.8	95.5	98.3	105.8	104.7	114.4
			QUARTERLY - SEASONALLY ADJUSTED			
1993–94–						
March	109.1	91.2	94.4	100.9	100.7	108.8
June	110.7	92.0	96.4	102.7	103.0	110.7
1994 95						
September	112.0	93.9	97.7	104.4	104.4	113.4
December	113.7	95.2	99.0	105.7	104.2	114.2
March	115.1	96.5	97.6	106.4	105.0	114.4
June	114.4	96.4	99.1	106.5	105.1	115.5
1995–96						
September	115.4	94.7	n.y.a.	n.y.a.	105.6	116.3

Sources: Organisation for Economic Co-operation and Development and ABS.

3.8 Consumer Price Index

CONSUMER PRICE INDEXES, ALL GROUPS EXCLUDING SHELTER
(1989–90 = 100.0)



Source: ABS. 6401.0. Quarterly data

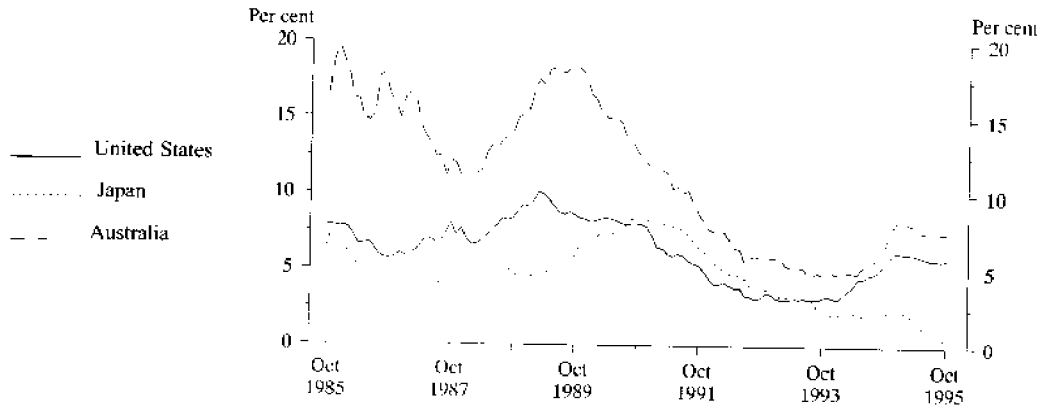
CONSUMER PRICE INDEXES, ALL GROUPS EXCLUDING SHELTER (a)
(1989–90 = 100.0)

Period	*United States*	*Japan*	*Germany (b)*	*Canada*	*United Kingdom*	*Hong Kong*	*Republic of Korea*	*Taiwan*	*Australia*	*New Zealand (c)*
					ANNUAL					
1989–90	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1990–91	105.5	103.4	102.7	105.5	107.7	110.8	109.1	104.0	105.6	104.0
1991–92	108.7	105.9	106.9	108.8	115.0	121.7	117.9	107.6	108.8	106.5
1992–93	112.1	106.8	110.5	110.8	118.6	130.8	123.5	111.4	111.0	108.7
1993–94	114.8	107.9	113.9	112.0	122.0	140.1	130.4	114.2	113.5	109.4
1994–95	118.0	107.8	116.4	113.4	124.8	151.4	138.0	119.1	116.5	110.5
					QUARTERLY					
1993–94—										
March	115.1	107.7	114.7	111.8	121.8	140.8	132.2	114.4	113.6	109.3
June	115.9	108.1	115.3	111.5	123.5	143.7	134.0	116.6	114.4	109.5
1994–95—										
September	116.9	107.7	115.6	112.2	123.4	147.6	136.6	119.3	115.1	109.8
December	117.4	108.2	115.7	112.4	123.9	149.6	136.2	117.2	115.7	110.4
March	118.2	107.4	116.8	113.9	125.1	152.9	138.4	118.8	116.9	110.6
June	119.4	107.8	117.5	115.1	126.6	155.5	140.7	121.0	118.3	111.3
1995–96										
September	119.7	107.3	n.y.a.	115.3	127.0	158.6	141.8	121.4	119.8	111.2

(a) Because of the many differences in the structure of the housing sector in different countries and in the way that housing is treated in their Consumer Price Indexes, an index which excludes shelter is used for the purpose of international comparisons of consumer price indexes. (b) The statistics for Germany refer to Western Germany (Federal Republic of Germany before the unification of Germany). (c) From March quarter 1994 the statistics for New Zealand refer to 'all groups excluding housing and credit services'.
Source: ABS, Consumer Price Index (6401.0).

3.9 Short-term Interest Rates

SHORT-TERM INTEREST RATES
(per cent per annum)



Source: Organisation for Economic Co-operation and Development, Monthly data

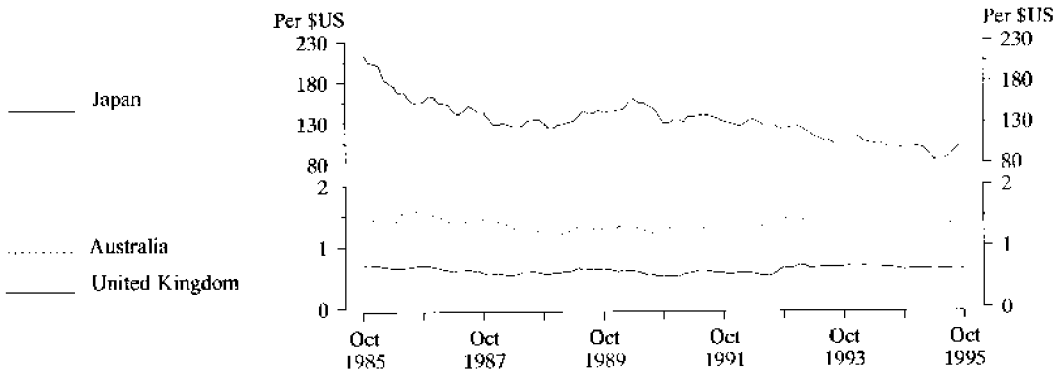
SHORT-TERM INTEREST RATES
(per cent per annum) (a)

Period	*United States*	*Japan*	*Germany (b)*	*United Kingdom*	*Australia*
			ANNUAL		
1989–90	8.23	7.39	8.30	14.97	15.10
1990–91	6.07	7.77	9.06	11.24	10.50
1991–92	3.86	4.66	9.75	9.98	6.40
1992–93	3.21	3.23	7.60	5.89	5.25
1993–94	4.52	2.11	5.07	5.13	5.45
1994–95	5.90	1.18	4.53	6.64	7.55
			MONTHLY		
1994–95—					
August	4.81	2.27	5.00	5.53	5.70
September	5.03	2.33	5.07	5.67	6.10
October	5.51	2.32	5.22	5.91	6.55
November	5.79	2.36	5.21	6.06	7.30
December	6.29	2.34	5.40	6.37	8.15
January	6.24	2.33	5.16	6.56	8.45
February	6.16	2.29	5.10	6.75	8.15
March	6.15	2.16	5.07	6.66	8.10
April	6.11	1.55	4.68	6.67	8.00
May	6.02	1.34	4.59	6.72	7.60
June	5.90	1.18	4.53	6.64	7.55
1995–96					
July	5.77	0.95	4.56	6.80	7.55
August	5.77	0.82	4.46	6.79	7.55
September	5.73	0.59	4.19	6.72	7.50
October	5.79	0.51	4.09	6.73	7.50

(a) Rates are certificates of deposit (United States), 3 months certificates of deposit (Japan), 3-month FIBOR (Germany), 3-month interbank loans (United Kingdom) and 90-day bank bills (Australia). (b) Monetary, economic and social union between the Federal Republic and German Democratic Republic took place on 1 July 1990.
Source: Organisation for Economic Co-operation and Development.

3.10 Exchange Rates

SELECTED EXCHANGE RATES
CURRENCY PER $US



Source: Organisation for Economic Co-operation and Development, Monthly data

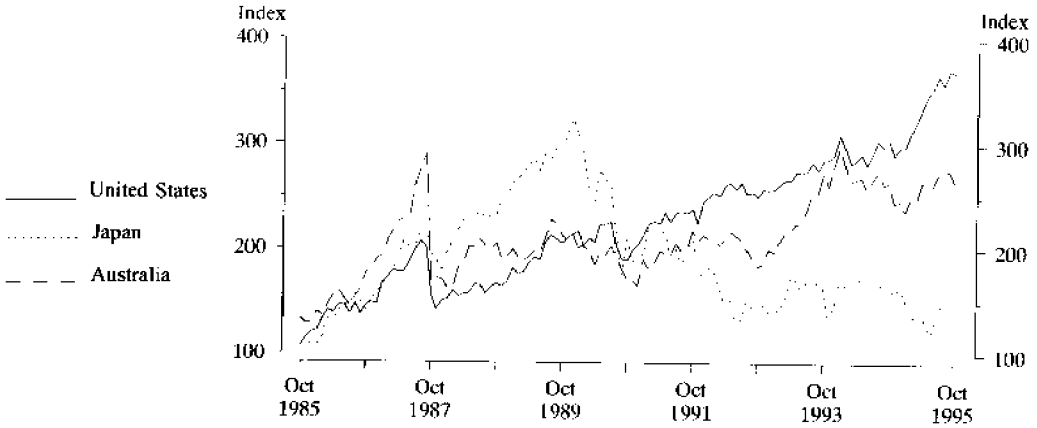
EXCHANGE RATES – CURRENCY PER US DOLLAR (a)

Period	*Japan (Yen)*	*Germany (DM) (b)*	*United Kingdom (Pound)*	*Australia (Dollar)*	*New Zealand (Dollar)*
			ANNUAL		
1989–90	153.76	1.68	0.58	1.28	1.72
1990–91	139.80	1.78	0.61	1.32	1.73
1991–92	126.91	1.57	0.54	1.32	1.85
1992–93	107.29	1.65	0.66	1.48	1.85
1993–94	102.69	1.63	0.66	1.36	1.69
1994–95	84.51	1.40	0.63	1.39	1.49
			MONTHLY		
1994–95					
August	99.86	1.57	0.65	1.36	1.66
September	98.79	1.55	0.64	1.35	1.66
October	98.40	1.52	0.62	1.36	1.65
November	98.00	1.54	0.63	1.33	1.61
December	100.16	1.57	0.64	1.29	1.57
January	99.79	1.53	0.64	1.31	1.56
February	98.23	1.50	0.64	1.34	1.58
March	90.86	1.41	0.63	1.36	1.55
April	83.58	1.38	0.62	1.36	1.50
May	85.27	1.41	0.63	1.38	1.50
June	84.51	1.40	0.63	1.39	1.49
1995–96					
July	87.25	1.39	0.63	1.37	1.49
August	94.49	1.45	0.64	1.35	1.52
September	100.47	1.46	0.64	1.33	1.52
October	100.70	1.41	0.63	1.32	1.52

(a) Monthly data are daily averages of spot rates quoted for the US dollar on national markets.
(b) Monetary, economic and social union between the Federal Republic and the German Democratic Republic took place on 1 July, 1990.
Source: Organisation for Economic Co-operation and Development.

3.11 Share Price Index

SHARE PRICE INDEXES
(31 JANUARY 1985 = 100.0)



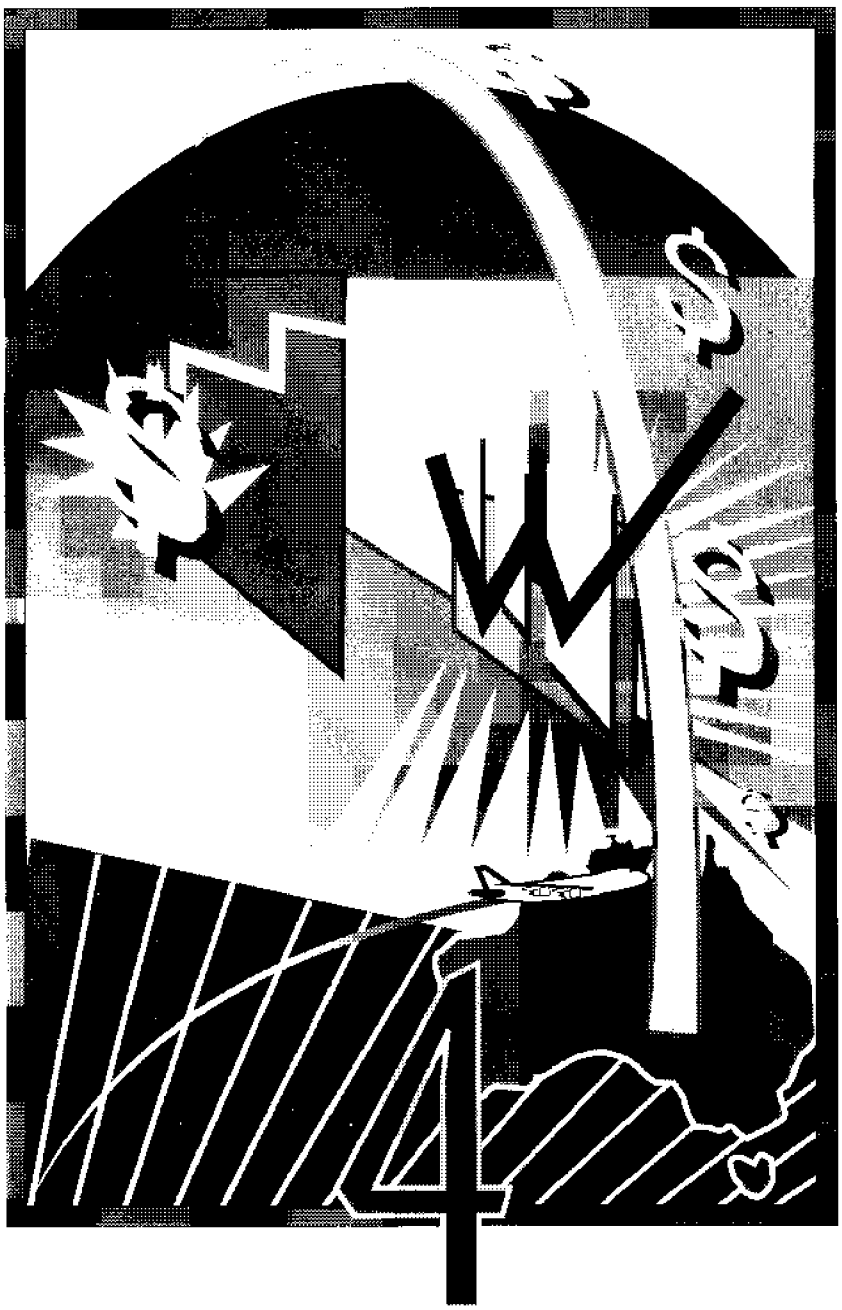
Source: Reserve Bank of Australia, Monthly data

SHARE PRICE INDEXES
(31 JANUARY 1985 = 100)

Period	*United States Dow Jones Industrial*	*Japan Nikkei - 225*	*Germany Commerz-bank (a)*	*United Kingdom FT Industrial Ordinary*	*Australia All Ordinaries*
			ANNUAL		
At end of					
1989–90	223.9	266.3	197.8	192.9	194.0
1990–91	225.9	194.2	165.6	190.6	194.8
1991–92	257.9	133.0	168.9	197.2	212.7
1992–93	273.2	163.4	161.4	230.5	224.8
1993–94	281.7	172.1	189.5	231.1	257.2
1994–95	354.1	121.1	189.9	251.9	260.8
			MONTHLY		
1994–95					
July	292.6	170.5	198.6	242.6	266.6
August	304.1	172.0	204.0	257.3	274.4
September	298.7	163.1	187.5	238.6	262.3
October	303.7	166.7	191.9	238.7	264.4
November	290.6	159.1	188.7	240.1	244.5
December	298.0	164.5	193.0	239.7	247.3
January	298.7	155.5	185.0	229.8	236.7
February	311.7	142.2	192.7	233.2	248.3
March	323.1	134.6	175.6	244.4	246.5
April	335.8	140.1	184.4	248.6	265.1
May	347.0	128.7	189.9	254.6	261.1
June	354.1	121.1	189.9	251.9	260.8
1995–96					
July	365.9	139.1	200.9	262.9	273.6
August	358.3	151.1	202.5	265.4	275.8
September	372.2	149.4	198.4	264.1	276.1
October	369.6	147.2	186.7	262.9	265.8

(a) Monetary, economic and social union between the Federal Republic and the German Democratic Republic took place on 1 July 1990.
Sources: Reserve Bank of Australia.

Chapter 4



CHAPTER 4
STATISTICS: CONCEPTS, SOURCES, METHODS AND USAGE

To assist your understanding of the statistics presented in Chapters 2 and 3, some of the more important or regularly occurring statistical concepts, sources, methods and usage are explained in this chapter. However, the explanations provided here are very brief, so if you require a detailed understanding of a topic, you must be prepared to undertake further research.

The ABS has a range of publications that discuss the following issues in detail. Some of these are included in the Further Reading reference at the end of this chapter. In addition, the publications listed as sources in Chapter 2 contain information on concepts, sources and methods of the statistics they relate to and, in some cases, provide reference to publications which explain the issues in further detail.

STATISTICAL CONCEPTS AND METHODS

Time Series

A data set is a collection of observations relating to a variable or group of variables. For example, a set of data could consist of observations of the population for each State and Territory in Australia at a single point in time, say census night 1991. This provides a snapshot view of the population of Australia which could be used to compare populations of the various States and Territories in terms of age, sex, etc.

A time series is a list of observations for the same variable or group of variables over a period of time. For example, a time series could consist of the population for Australia for each year from 1980 to 1990. Time series enable recent estimates to be placed in a meaningful historical perspective, which permits analysts to see if the current situation is improving, deteriorating or staying much the same.

When compiling time series for analysis, care should be exercised that data has not been revised. Many statistical series produced by the ABS, especially derived series like national accounts, are subject to revision as more information becomes available. Seasonally adjusted and trend series are always subject to revision.

Classifications

Classification is the grouping of data into classes or categories according to various characteristics. For example, retail businesses may be classified according to what they sell. Instead of just compiling data about 'retailers', data could be compiled separately for footwear stores, butchers, newsagents, etc.

The ABS has defined standard classifications that are used to present a wide range of data. Some examples of these are:

- Australian and New Zealand Standard Industrial Classification (ANZSIC);
- Australian Standard Geographical Classification (ASGC);
- Australian Standard Commodity Classification (ASCC);
- Standard Institutional Sector Classification of Australia (SISCA).

Classifications have a standard framework which enables clear scope (boundaries) for the collection and compilation of data. This makes it possible to compare and analyse data from different surveys over a period of time.

ABS classifications align closely with international classifications enabling comparability with international statistics. A wide variety of organisations (government, private sector, educational institutions, etc.) use the ABS classifications for a variety of purposes including the analysis of data and running their own surveys and censuses. This enables them to compare their data with data from the ABS and from other organisations which use the same standard classifications.

Constant Price Estimates

Constant price estimates provide a convenient way of measuring *real* change in various economic statistics, that is, the growth after adjusting values to remove the direct effects of price changes.

Many economic statistics, such as gross domestic product, relate to a wide range of goods and services. Our difficulty is how to aggregate different units of measurement, e.g. the number of cars produced with tonnes of steel produced. If we use a common unit of measurement, i.e. money values (or dollars), we can express transactions for a range of goods and services as a single aggregate.

However, change in money values from one period to another is generally a combination of change in price and a change in quantity. In most cases, we are interested in changes in the physical quantities underlying the dollar values, e.g. the change in the number of cars produced. As a result, estimates are adjusted to remove the direct effects of price changes. Such estimates are said to be *at constant prices* (or in real terms).

The current price value of a transaction may be thought of as being the product of a price and a quantity. The value of a transaction at constant prices can be derived by substituting, for each current price, the corresponding price in the chosen base year.

It is not possible to derive constant price estimates for items such as interest rates or profits that do not have price and quantity components. Nevertheless, such items can be expressed in real terms by deflation using a price index in order to measure changes in the purchasing power of the item.

This involves dividing the current price values by a broad indicator of price change such as the CPI or the implicit price deflator of GDP. The underlying assumption is that these price indexes are representative of price change of the goods and services that could be purchased with the money earned from profits, interest, etc.

Base Year Selection

Most developed countries have chosen to rebase their constant price estimates either every 5 or 10 years. The ABS has chosen to rebase its estimates every 5 years. The current base year is 1989-90.

Indexes

An index number measures the value of a variable in relation to its value at a base period. The essential idea of index numbers is to give a picture of changes in a variable much like that drawn by saying 'the price of petrol rose 5% from June 1992 to December 1993'. Index numbers measure change without giving the actual numerical value of the variable. Change is measured from a base period which is expressed as 100.0.

$$\text{The index number} = \frac{\text{current value}}{\text{base value}} \times 100.$$

Because indexes summarise change, they are useful in economic analysis.

Movements in index numbers from one period to another can be expressed either as percentage changes or as changes in index points. It is important not to confuse the two methods because unless the comparison is with the base period, the two yield different results.

Seasonal Factors

Some data are influenced by the nature of the period to which they relate. For example, sales of sunblock are higher for January than for July. Normal seasonal influences on data are those effects that recur regularly one or more times a year. Data that are seasonal may reflect the influence of the seasons themselves (such as farm production) or social convention (such as the incidence of holidays) or economic factors (e.g. timing of tax payments and financial year timing). Some data reflect differences in the composition of the months or quarters in terms of the number of trading days in the period or accounting practices used.

This feature of the data can make interpreting monthly, quarterly and yearly changes difficult and so the ABS uses a special statistical tool called *seasonal adjustment* to standardise the data. Seasonally adjusted data has had all the calendar-related influences removed.

Seasonally adjusted data still contains the effects of irregular influences on the data. For example, sales of beer may have been affected by some large, one-off event such as a strike in several large breweries. Seasonal analysis does not remove such effects but the ABS is able to significantly dampen such irregular influences in seasonally adjusted series by producing a *smoothed seasonally adjusted* or *trend* estimate.

Trend Estimates

The smoothing or trending procedure used by the ABS is based on a set of moving averages known as Henderson filters. These moving averages dampen the irregularity of data without distorting the timing, level or shape of turning points, i.e. peaks and troughs. Trend estimates provide a simple yet very effective measure of the underlying growth or decline of a time series. They also provide a much wider basis for analysis than the more erratic seasonally adjusted or original data.

National Accounts

With separate indicators, particular aspects of economic activity can be monitored. Another important use of this information is as the building blocks of a set of accounts for Australia, called the national accounts. Just as a set of accounts for a business consolidate a lot of information about the business and present it in a set format, national accounts consolidate

a range of statistics, from those involving individuals to those involving the whole nation, into a consistent format which describes the overall economic position of the nation.

The concept of national accounting is quite old, having been developed as far back as the 17th century. However, its current look is relatively new, with welfare economists led by Pigou in the 1920s producing the first effective modern measurement of national income. A fundamental re-direction of emphasis in economic analysis and policy occurred after the acceptance and adoption of principles set down in John Maynard Keynes' 1936 publication *The General Theory of Employment, Interest and Money*.

As a result, national accounting has developed as an integral part of economic analysis and policy advising. Government interest focused on production and the allocation of resources to competing uses. Macro-economic policy, concerned with the maintenance of income, price and employment stability, was dependent for much of its effectiveness on timely and accurate information on the components of domestic production. To provide conceptually consistent information and to illustrate the relationships between the components, estimates were gathered into a system of national accounts.

Australia's national accounts are compiled in a manner which closely accords with the recommendations of the United Nations *A System of National Accounts* (SNA), which was published in 1968. Further work on the development of national accounting standards to reflect changing economic and policy requirements since 1968 has culminated in the publication of the *System of National Accounts 1993* (SNA93). This document was produced jointly by five international organisations: the Commission of the European Communities, the International Monetary Fund, the Organisation for Economic Co-operation and Development, the United Nations and the World Bank. SNA93 is expected to provide a framework for national account statistics into the 21st century.

At the summary level, the national accounts are designed to reflect the economic flows of the Keynesian system: production, consumption, investment and saving. The relationship which Keynes elaborated (that production is equal to the value of incomes received and in turn equal to the value of final expenditures) is summarised in the equation:

$$Y = C + I + X - M$$

In this equation, Y represents income, C represents consumption, I represents investment, X is exports, and M is imports. The relationship between Keynes' work and national accounts becomes apparent when the domestic production account from Australia's national accounts is examined.

On the **income side** of the account are the incomes accruing to the factors of production: wages, salaries and supplements earned by labour, operating surplus (profits) earned by capital and net indirect taxes accruing to government. On the **expenditure side** of the account are final consumption expenditure, investment (represented by gross fixed capital expenditure and increase in stocks), plus the value of Australia's exports (which are part of Australia's total production) minus the value of imports (which represent part of the production of other nations).

The various terms from the equation Y= C + I + X - M are grouped into four major accounts in Australia's national accounts. The *domestic production account* summarises domestic production, income and expenditure. Consumption is examined in more detail in the *national income and outlay account*, saving and investment in the *national capital account* and exports and imports in the *overseas transactions account.*

National accounts estimates attempt to account for every monetary transaction of every economic agent in the economy, as well as imputing a value for a range of transactions that do not involve the exchange of money (for example, when producers consume their own products). The quality of national accounts statistics depends to a large degree on the quality of the original records maintained by businesses, governments and other institutions from which data are obtained.

INTERPRETING STATISTICS

Definitions

It is important that your understanding of relevant terms correspond to the ABS definitions. This ensures that interpretation of terms is uniform and the information is used in the right context. For example, how do you define 'unemployment'? Compare your definition with the ABS definition. Most ABS publications contain definitions of the information they include.

Footnotes

Footnotes are used to add comments and/or explanations to the tables or graphs. Footnotes are indicated by the inclusion of a letter in brackets e.g. (a), (b), (c), etc. beside the figure or heading which requires explanation. This letter and its footnote are presented under the table or chart.

The position of the footnote reference is important in the table or graph. If the footnote reference is in the title of the table or graph, then the message in the footnote relates to the whole table or graph. If it appears next to a column heading, then the message in the footnote applies to the data within that column. When analysing statistics, it is important to give attention to the footnotes as they often point out limitations in the data which could significantly affect interpretation.

Explanatory Notes

Explanatory notes are designed to assist the user in understanding the data in the publication. They provide information on the data collected and the method of collection and are useful in highlighting the limitations of the data. For example, explanatory notes generally include descriptions of the methodology and scope used to collect the data, data definitions, reliability of estimates, seasonal adjustment and comparability with other data.

Averages

An average (arithmetic mean) provides a useful summary measure of the contents of a set of data. However, averages can give a very deceptive picture of the meaning of statistics if they are misunderstood or misused. The average is affected by extremes in data (highest and lowest values) and unequal distributions. It may be beneficial in analysis to also examine the mode (most frequently occurring value) and the median (the value in the middle of an ordered data set) as a guide to the characteristics of the data.

Composition of Totals

Analysis of totals will give you an idea of overall trends in time series data. To gain a more complete understanding of the data, however, an analysis of the components making up the totals is necessary. For example, there were more women than men in Australia at the 1986 census. However, further analysis shows men outnumbered women in each age group up to the 50 to 59 years age group, but women outnumbered men greatly in the older age groups.

Graphs

Graphs are an excellent way of presenting data. They enable the user to get a feel for the data quicker than using tables or from text.

Graphs, however, can very easily be misleading and care should be taken in interpretation. Care must be taken to understand what the title and axis headings mean and what data series are actually represented in the graph. Attention must be paid to the units (e.g. millions of dollars, persons) and the scales used.

Surveys and Censuses

Ideally, if we want to find out something about a group of people or businesses, we would approach every person or business in the group (called the population). This is called a census. The best known census is the Census of Population and Housing, which collects information from every household in Australia. However, by applying the rules of sampling, a reliable picture of a population can be drawn from a selection or a sample of that population. The key lies in selecting a sample that is representative of the whole population.

An advantage of sample surveys over censuses is that they are cheaper and are easier to run. However, one main disadvantage is that the results contain *sampling error*, which is the difference in the results obtained by using a sample of the population rather than the whole population. In some instances this error can be quite large. Where information is being analysed from sample surveys, the size of this error should be taken into account when assessing the credibility of results. Sample survey and census results can also contain *non-sampling error*, which is error resulting from collection and processing errors, e.g. respondents being unable to accurately recall information or mistakes made in recording or coding.

STEPS IN ANALYSIS

Although there are no hard and fast rules to the correct approach, the following steps may give you a starting point for analysing time series data.

(a) Determine what data are available and relevant to your topic. The ABS *Catalogue of Publications and Products* (1101.0) is a good place to start.

(b) Look at the layout of the table in order to understand how the data are arranged. Check the row and column names to obtain a clear idea of the variables being displayed.

(c) Scan the totals in the tables for an overall idea of the trends in the data. A graph is often the most appropriate tool for this analysis. If no graph is presented, consider graphing the data yourself to get a clear picture.

(d) If the data are available by different frequencies (e.g. annually, monthly), decide which of the available frequencies is most appropriate for your purpose. Annual data may be appropriate for examining data over a long time; quarterly or monthly data may provide a better picture of more recent developments.

(e) Make sure you have a clear idea of the questions for which you seek answers in the data. For example:

- are the values of the variable rising or falling over time?
- when was the last peak (high point) or trough (low point)?
- has the rate of change risen or fallen over time?
- have the shares of components in the total changed over time?

It is important to conduct your analysis one logical step at a time. Do not try to take all the information in at once and try not to get side-tracked with minor issues as you do your analysis.

Further Reading

☐ *An Introduction to Sample Surveys — A User's Guide* (1202.2)
Contains a basic guide to the use of sample surveys. Topics covered include survey objectives, data collection methods, questionnaire and sample design, sources of error, survey testing, data collection and processing and analysis and presentation of results.

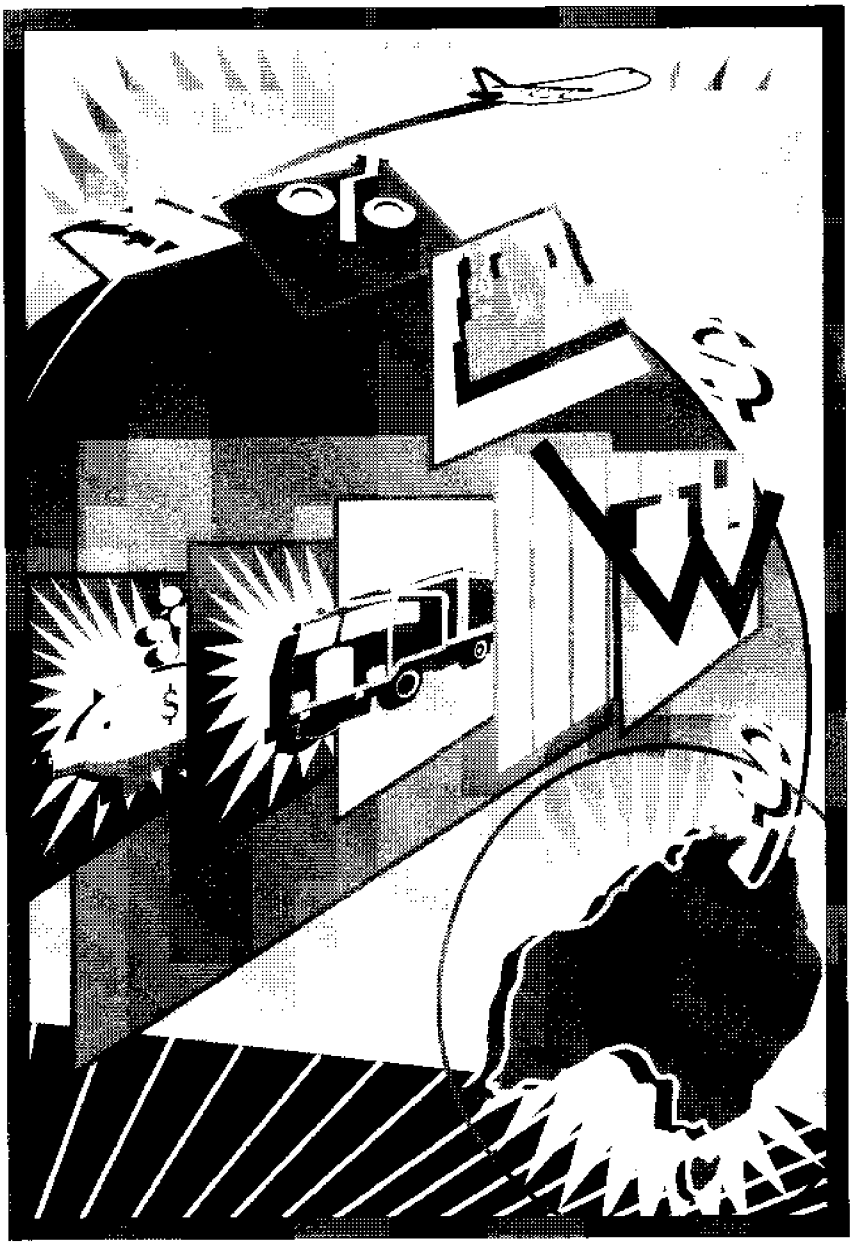
☐ *Concepts and Methods of Seasonal Analysis* (1315.0) - to be released in 1996
Provides coverage of the theory underlying seasonal adjustment and the methods used by the ABS. Includes guidance for the interpretation of seasonally adjusted data.

☐ *Statistics - A Powerful Edge!* (1331.0)
A comprehensive guide to understanding statistics - designed for the reader to gain confidence in using statistical information.

☐ *Surviving Statistics — A User's Guide to the Basics* (1332.0)
A comprehensive basic guide to understanding and using statistics.

☐ *A Guide to Interpreting Time Series — Monitoring* 'Trends' (1349.0)
Explains why, in ABS publications, the main features and commentaries sections concerning most time series are increasingly emphasising the trend series rather than the seasonally adjusted or original data. It also explains how these trend estimates are obtained as well as how they may be used more effectively for informed decision making.

☐ *Australian National Accounts: Concepts, Sources and Methods* (5216.0)
Contains the history, conceptual framework and structure of the national accounts, including an explanation of constant price estimates.



ABS LIBRARY EXTENSION PROGRAM

ABS data are available at a variety of libraries.

The ABS Library Extension Program (LEP) makes ABS publications freely accessible to the community via public, State, TAFE and university libraries. Many school libraries also hold ABS publications. Please contact your library to establish its opening hours and to determine whether it has the ABS data you require.

Basic ABS statistics are also freely available to the public via the Internet. The **ABS StatSite** contains ABS data across a range of subjects, including key economic indicators and also includes a full address list of LEP libraries across Australia.

The **ABS StatSite** address is **http://www.statistics.gov.au**

University students - providing that your university is a subscriber, you can obtain a more extensive range of ABS data via the Internet - the ABS Time Series Service. Contact your university librarian for assistance.

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